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Physical Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

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Physical Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

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Physical Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

Abstract

Background Patients with multiple, persistent physical symptoms and health anxiety often report poor health outcomes. Patients who are difficult to reassure are challenging for family physicians. The therapeutic alliance between a physician and patient can influence the prognosis of these patients. Optimizing the quality of the physician-patient alliance may depend on a better understanding of the interpersonal processes that influence this relationship.

Objective The purpose of this study is to explore the experiences of patients and their physicians when they interact to understand the features of this relationship and subsequently improve this alliance.

Design, participants and Setting We conducted a qualitative study using grounded theory of 18 patients, purposively sampled to select patients who reported high physical symptom severity, high health anxiety or both, and 7 family physicians. This study was conducted at a Family Medicine clinic in a teaching hospital.

Results A model of interpersonal tension and collaboration for patients and physicians in primary care was developed. Helpful attitudes and actions as well as troublesome topics influence crucial dilemmas between patients and physicians. These dilemmas include if patients feel heard and validated and the alignment of goals and mutual respect of expertise and experience between patients and physicians. These experiences contribute to a constructive collaboration and in turn positive outcomes.

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Conclusions This model of patient-physician interaction may facilitate providers to turn their attention away from the contentious topics and towards actions and attitudes that promote beneficial outcomes.

Strengths and limitations of this study

- Semi-structured interviews allowed in-depth discussion
- Development of model that will inform clinical care
- Study cohort consisted of 25 participants

Keywords family medicine, health anxiety, physical symptoms

Word count 3748

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Introduction

Primary care office visits by adults are, most often, for chronic conditions or new problems, which typically involve physical symptoms (1). Persistent physical symptoms are associated with poor outcomes when they are multiple (2) and when they are accompanied by health anxiety (3), which is characterized by preoccupation about disease and difficulty being reassured (4). Multiple physical symptoms and high health anxiety are common and are associated with more medical consultations, poorer physical functioning, higher psychiatric morbidity, and higher rates of outpatient visits and hospitalization (5, 6). Although health anxiety and multiplicity of physical symptoms are related to one another, they are independently associated with these outcomes (7). Correlates and antecedents of multiple and severe physical symptoms and health anxiety include being female, having experienced childhood adversity, anxiety disorders, depression, personal or family chronic illnesses, lower socioeconomic status, and other social stressors (3, 8-11).

When physical symptoms are not readily diagnosed, treated and relieved, interactions been patients and physicians may become difficult (12). They may disagree about the cause of symptoms and particularly about the relative contribution of physiological and psychological factors. Clinicians may refer to persistent, difficult to manage symptoms as resulting from somatization, which implies psychological pathology (5), or simply as medically unexplained symptoms (13) and can result in the patient feeling invalidated or stigmatized.

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Importantly, the therapeutic alliance between a physician and patient can influence the treatment and prognosis of patients with unexplained symptoms (15). A positive alliance can be challenging because patients report dissatisfaction with their care (16-18) and physicians often describe patients with unexplained symptoms as difficult and dissatisfying (17, 19). There is often a discrepancy between what patients with unexplained symptoms expect and what they receive from their family doctor (20). In one study, patients described their doctor's explanations of the symptoms as rejecting the reality of their symptoms (21). Patients also describe being caught in a power struggle with doctors and health systems (22). From the doctors' perspective, family doctors feel that they lack psychological training or skills to deal with these challenges (23). They experience frustration, a sense of inadequacy, and powerlessness, and these responses influence clinical decision-making and the doctor-patient relationship (24, 25).

Optimizing the quality of physician-patient alliance may depend on a better understanding of the interpersonal processes that influence this relationship. The purpose of this study is to understand the experiences of patients with high physical symptom burden or health anxiety and their family doctors when they interact with each other in a primary care setting in order to understand the overt and nuanced features of this relationship and subsequently improve this alliance.

Methods

We conducted a qualitative study using grounded theory to explore how interpersonal relationships between patients and family doctors influence the experience of care in the setting of multiple or severe physical symptoms and health anxiety. The research was

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conducted at the Granovsky Gluskin Family Medical Centre at Mount Sinai Hospital in Toronto, Canada, which has about 45,000 patient visits annually. The family health team, which includes twelve staff physicians as well as residents, provides a full range of primary care services including general, preventive and acute care for all ages. Our research team provided diverse perspectives on the meaning of the data. The team included a family doctor, who is also a clinical teacher and developer of curriculum (EB), a child psychiatrist with extensive experience with medically unexplained symptoms (RG), an adult psychiatrist of patients with high symptom burden and health anxiety, who also researches the impact of interpersonal relationships on healthcare (RM), and research scientists specializing in the impact of interpersonal relationships on health behaviour (TL) and in how health professionals develop and maintain expertise (MM). This study was approved by the Mount Sinai Hospital Research Ethics Board.

Participants and sampling

Participants were purposefully selected to explore how patient-physician interactions influence the experience of care for patients with burdensome physical symptoms (regardless of whether or not these symptoms are fully explained by organic pathology) or health anxiety. We recruited patients who had previously participated in a survey of childhood adversity, attachment insecurity, symptom severity and health anxiety. We used purposive sampling to select patients to invite for interviews who, based on the survey data, met the criteria of high physical symptom severity (PHQ-15 score of > 9 (26)), high health anxiety (Health Anxiety Inventory score of > 17 (27)), or both. Patient participants were at least 18 years old but otherwise not selected for age, gender or other demographic characteristics. Patient participants were invited to participate by email.

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Physician participants were recruited from the Family Health Team via self-referral after notification of the study via email and team meetings. Every physician who volunteered was interviewed. Informed consent was acquired in person prior to patient and physician interviews.

Patient and Public Involvement

Key informants informed the research question. Patients and the public were not involved in the design, recruitment or conduct of the study. A lay summary will be prepared for patient participants of the study and a grand rounds presentation was prepared for physician participants.

Data collection

Eighteen patients and seven physicians participated in individual, semi-structured interviews by one researcher (TL) from July to December 2019. Interviews were from 30 to 45 minutes long. The interview guide was developed with input from key informants and the consensus of the research group. It was iteratively revised over the course of interviews to include themes developed through the analysis. In addition to responses to the interview guide questions, participants were invited to share any experience they thought was relevant. Data collection continued until we achieved theoretical saturation (28). Interviews were anonymized, transcribed and analyzed concurrently with data collection.

Analysis

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Interview data was coded and categorized using NVivo 12.5 (QSR International, Burlington, MA, USA, 2020). An iterative, constant comparative approach of grounded theory was used to identify, analyze and report themes within the data (Braun & Clarke, 2006) and to revise the interview guide as new themes were identified and explored. To provide a diversity of perspectives on the meaning of the data and how to label and define emerging themes, a key feature of thematic analysis is for several individuals to read and interpret the transcripts from the interviews. Two team members (TL, RM) reviewed the anonymized transcripts to organize data into themes. They coded the transcripts separately to identify concepts, key words and reflections, and then compared their results with the other members. After the first four patient interviews, the research team (RM, TL, MM, EB, RG) met to discuss coding themes. Member checking with key informants was used to revise the interview guide to include themes developed through the analysis. Researchers (TL, MM, RB) met during the further data collection to discuss and refine the coding framework and themes. The research team met again to review and refine the conceptual framework that evolved through the data analysis and EB sh.

Results

In our interviews, both patients and doctors found that their interactions could be very frustrating. They agreed about certain common topics that caused conflict. While these topics provided the content for conflict, it was the interpersonal process in how they managed these challenging interactions that seemed most important to the outcome. Patients identified attitudes and actions that can be adopted by physicians that promote a positive resolution of those tensions. Patients and physicians agreed that positive interactions support good outcomes.

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Patients and physicians experienced mutually frustrating interactions

Both patients and doctors spoke of how frustrating their interactions could be.

At times I kind of secretly wish that maybe she would find another doctor because I do find our relationship so difficult... (Doctor 2)

They identified strong negative emotions and sometimes a lack of trust.

I was really annoyed with [doctor] about the MRI. That scared me, and I was so mad at her that I told her that if it turned out that it was a problem, I was going to sue her. I was so mad, because I did not trust her. (Patient 2)

Physicians described their frustration in terms of power struggles and no-win interactions.

I feel pushed into doing more tests than I would normally do which is frustrating but also worries me because you can always find some sort of suspicious finding in the tests... It's kind of a nightmare. (Doctor 1)

Often these frustrating interactions were about certain common topics.

There were clearly identified 'troublesome topics' for patients and physicians

A small number of troublesome topics often led to conflict. The first of these was whether or not a patient needs tests or a referral. Several patients expressed a desire for investigations and referrals that was resisted by healthcare professionals.

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One thing I'm trying to convince [the doctor] to do… I want to get a full body MRI done… I haven't sold him on that yet. (Patient 3)

Doctors were aware that over-investigation can be harmful. Some felt that giving in to pressure to investigate symptoms amplified tension in the clinical interaction.

Don't give in to all the tests and stuff they want… the more tests I ordered the more they were coming back and it didn't ease anything and make anything better. (Doctor 5)

Others felt that sometimes doing a test that is not strictly indicated was valuable for the purpose of reassurance.

The over-testing and over-referral… like we don't want to necessarily do that. But I recognize… helping them to live with that anxiety… sometimes may necessitate doing a test. (Doctor 4)

Some patients reported that the results of tests did not provide clarity.

I had every test done under the sun... Everything came back negative... Basically, I was left with, 'we can't figure out what's wrong with you.' (Patient 4)

Another troublesome topic was the possibility of missing a serious disease because of attributing symptoms to anxiety. Both patients and doctors worried about this.

When patients present frequently with… symptoms that don't really fit a specific diagnosis… that can lead me to wonder if maybe I've missed something. (Doctor 2)

One doctor acknowledged that the concern over missing something serious and the patient's inability to be reassured were mutually reinforcing.

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I find the patients who cannot be reassured very challenging because they tie into my own anxiety about missing things, and I feel that at the end of the visit often neither of us is satisfied. (Doctor 1)

Another troublesome topic was the possible role of psychological factors and stress contributing to physical symptoms. Some patients made no connection between current and past life stressors and their current symptoms.

I usually know that there are psychosocial roots for their ongoing health anxiety. I try to explore those areas and often I'm met with resistance. (Doctor 1)

Other patients saw clear links.

I think that mine is a chronic trauma from childhood, which for me… manifests bodily. I did have a very sensitive body, and I feel everything highly so I get stomach upset and heart palpitations at the slightest thing... (Patient 1)

Some doctors expressed a belief that a successful outcome depends on patients accepting the psychological roots of their current difficulties.

I do think it's helping them try to get inside into their own symptoms… the primary goal which might be helping them make that connection between what's going on in their life and their symptoms. (Doctor 2)

Finally, prescription medication was often contentious. One common source of conflict was whether or not a patient would take psychiatric medication.

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Well, since I staunchly do not want to take [psychiatric] medication, it's a little bit difficult for her to talk to me about it, because the area that she could help me with… I don't want anything to do with. (Patient 8)

Conflict also often arose over whether or not a doctor would prescribe medication to reduce symptoms, often pain.

Sometimes I'll go in and there's a med that I've used before… and I know it helps for a certain thing and they're like, no, we're not going to give it to you. (Patient 3)

While these troublesome topics provided the content for difficult interactions, it was the interpersonal process in these discussions appeared to be crucial. In other words, troublesome topics provoked tensions or conflicts that challenged how patients and physician *interacted with* each other.

Troublesome topics often led to interpersonal challenges in the patient-physician relationship

Certain interpersonal challenges were identified: being heard or not, agreeing on goals, respecting each other's expertise and feeling validated or not.

Patients consistently endorsed the importance of "feeling heard." When they did not feel heard, little else could be accomplished.

[The doctor] was very one-way... And I honestly walked out, because she wasn't listening to what I was saying. (Patient 10)

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What asked what it meant to be heard, patients spoke both of their physician actually listening, and also of the shared understanding that resulted.

I feel he heard me... he really listens, understands, and knows you have a medical problem. (Patient 9)

Sometimes the evidence of being heard was that a physician remembers what has been said from one appointment to another.

She'll basically recap the last time that I saw her, and even saying little things that aren't necessarily things that she may have written down. (Patient 4)

Disagreeing on short-term goals was often related to the troublesome topics of medication or tests.

[I asked for an MRI] and she said, so, what's the reason for it? What's the point that you want to do this?... everything is a fight today. Anyway, I kind of just felt myself slump when she said that. (Patient 12)

One doctor described wanting to help a patient shift her goal from cure to optimal function.

She's like once we get this cured I'm going to be back to normal. And I think… I hope that you do go back to your normal but you know, you've been this way for five years and unfortunately you haven't been able to go back full time yet... You want to be able to provide information that allows them to function as well as they can. (Doctor 6)

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Patients and doctors discussed appreciating each other's goals and negotiating. For the patients, this was often explicitly linked to doctors listening.

[A doctor can provide the best possible care by] listening and taking in all the information, and then, I think, suggesting a plan. But then, also, asking what the patient feels the next step should be. (Patient 5)

Both patients and physicians wanted the other to respect their expertise. Patients want to be recognized as the experts of their own experience.

[What I want is] respecting me as a human being, respecting me as somebody who is an equal and knows my problems better than you do... (Patient 13)

Doctors do not want to compromise their medical expertise.

I think there is always that tension of wanting to preserve the doctor-patient relationship but not being prepared to do things or behave in ways that compromise your own sense of professional self. (Doctor 1)

Finally, physicians were challenged to help a patient feel validated: acknowledging the patient's perspective, reassuring them that their experiences are understandable, acknowledging progress and keeping the patient "in mind."

I think the fact that she validates my challenges and doesn't tell me that I'm dreaming them up is extremely important... [but] if I'm over-thinking a situation, she'll tell me. She'll say, this is something that you don't need to be worried about. (Patient 13)

Invalidating experiences often result from dismissing a patient's concerns or perspective.

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I couldn't walk very far because [I couldn't control my bowels]… And she said, oh, that's just ridiculous… So, I was really upset about it. (Patient 2)

A validating experience can be challenging to accomplish when patients are reluctant to speak about their needs or their fears.

I'd be too embarrassed to go make the appointment with the doctor, to say, I'm frightened of this medication or the impact that this mental illness is having on me, and I need reassurance… it would be humiliating. (Patient 7)

Fortunately, since the successful resolution of these interpersonal challenges is important, patients identified things that physicians can do to foster successful listening, validation, agreement on goals and respect of each other's' expertise.

Specific physician attitudes and actions promote successful resolution of interpersonal challenges

Patients identified a number of ways that physicians can influence interactions positively, including listening actively, communicating clearly, spending time, collaborating and providing advocacy.

She definitely heard and she knew why I wanted [a test]. I knew why she didn't want to do it. Yes, I think we both heard each other… She's very easy to talk to. (Patient 12)

Physicians spoke about the benefits of managing expectations, and of collaborative negotiation.

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Half of what we do is trying to understand… the patient's real concerns… what they expect… and then negotiating something sensible. (Doctor 3)

Patients also described positive experiences of negotiating goals.

I was like, I want to completely stop my medication. And he, kind of, said, maybe you shouldn't do that. It seems like they're working... But we've kind of worked on that, so lowered the dosage... (Patient 16)

Patients also appreciated physicians keeping an open mind, providing expertise, and allowing time.

When I went to see [doctor] last, I wanted to ask him about [antidepressants]... He didn't try to push anything on me… I was grateful that… I didn't get the sense of an ultimatum, or you have to do this. (Patient 7)

Constructive interactions demonstrated compassion and fostered trust.

She told me she trusts me... I think when they care about you, you care about yourself more too. (Patient 15)

Doctors and patients identified collaboration emerging out of good interactions and trust.

At some point I think we created a bond enough that I felt comfortable enough to say 'Look. I know you're feeling these physical symptoms but… there is an underlying issue that's going on. Like how are you doing outside of here?... And then like the visit after that he just kind of brought up… his issues with his ex-partner.... And he's like you know

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what, after that relationship broke down that's when I started feeling all these things.

(Doctor 5)

Discussion

Summary

The reports of these patients with high physical symptom burden and/or health anxiety and their family doctors suggest that both may find their interactions quite frustrating, often because of conflicts that arise from troublesome topics and which lead to challenging interpersonal interactions. They navigate interpersonal dilemmas in which patients experience themselves as well heard and validated or not, and doctors and patients find their goals align and their individual expertise is respected or not. Successful resolution of these dilemmas is facilitated by physician attitudes and actions, which include spending time, active listening, keeping an open mind, showing compassion, providing advocacy, communicating clearly, managing expectations, and providing medical expertise. Success in dealing with these dilemmas is marked by collaborative interactions in which conflicts are negotiated, and differences of opinion are tolerated. We have mapped this sequence in a model (Figure 1).

Comparison with existing literature

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Our results converge with previous research showing that contentious topics include disagreement over the necessity of medications, patients with unrealistic expectations of care or vague complaints, or patients who do not follow advice, provide expected respect, or are time-consuming (12, 29). These difficulties are associated with physician burnout, stress and intent to leave one's practice (29). On the patient's side of the interaction, tensions have previously been attributed to a professional having limited time, medications prescribed without discussion, poor continuity of care, and a focus on disease instead of the whole person (30). Our study advances this understanding by suggesting that while certain topics often lead to conflict, they need not doom the interaction to a mutually frustrating stalemate. Attention to interpersonal *process*, rather than just the *content* of disagreement is helpful and there are a number of attitudes and actions available to physicians that foster collaboration and constructive interpersonal relationships.

The literature suggests that each participant seems to attribute the cause of difficulty to the other. One possible benefit of the model developed here is that it directs attentions to interactive or relational aspects of these challenges. This observation aligns with patient-centered primary care that involves attention to the quality of the doctor-patient relationship, including attention to communication skills, empathy, and compassion (31, 32). The model is also consistent with approaches to care that emphasize the value of validating patients' perspectives in patient-centered (32) and trauma-informed care (33). Validation of patient experiences and reports is also a key aspect of several psychotherapies that improve interpersonal functioning, especially dialectic-behavioral therapy (34). Indeed, the formative benefits of parent-child interactions that are validating

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and the harms of early experiences that are invalidating may be a relevant antecedent, given the association between early life adversity and both unexplained symptoms and difficult medical encounters (8, 10, 11, 35). These associations suggest that invalidating clinical encounters for patients with high physical symptom burden and health anxiety may represent an "echo" of earlier developmental difficulties, and present a risk of re-injury for patients with such past experiences.

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Strengths and limitations

The grounded theory method used in this study is able to describe the experiences of patients and doctors, including areas of conflict and contradiction (e.g. divergent views about the value of negative tests for reassurance), as they occur within the setting in which the study was conducted. Purposive sampling of patients with high physical health burden and health anxiety may increase the salience of participants' observations to others with similar concerns. Generalization of the conclusions to other settings requires an appeal to sources of validation that are beyond the evidence provided in the study itself, such as the consistency of the model the study generated with other theoretical models.

Implications for research and/or practice

The model illustrates that focusing on the content of conflictual topics leads to clinical deadlock, while prioritizing interpersonal process may provide opportunities for positive change. In the primary care setting, attention to interpersonal process requires a mix of

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patient-centered communication skills, especially asking about patients' concerns, priorities and values and listening actively to their responses, responding to patients' emotions, with genuine personal engagement and emotional involvement and engaging in shared decision making (36).

In summary, our data suggest that physicians' attitudes and actions, such as those that promote feelings of validation, may help overcome troublesome topics and lead to positive interactions and constructive collaboration between patients and physicians. One potential value of this model is that it may encourage clinicians to shift their focus away from those troublesome topics (content) and towards building trusting relationships with their patients (process). This study provides experiential observations of patients and doctors in family medicine that support that value of interpersonal skills and strategies in managing very common and challenging presentations of burdensome physical symptoms and high health anxiety.

Additional Information

Author Contribution: TL, RM, and MM designed the study. TLL, MM, EB, RG, RM performed the analyses. TL conducted the literature search and wrote the first draft of the manuscript. All authors contributed to and have approved the final manuscript.

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Ethical approval: This study was approved by the Mount Sinai Hospital Research Ethics Board.

Conflicts of Interests: None declared.

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References

1. Ashman JJ, Rui P, Okeyode T. Characteristics of Office-based Physician Visits, 2016. NCHS Data Brief. 2019(331):1-8.
2. Jackson J, Fiddler M, Kapur N, Wells A, Tomenson B, Creed F. Number of bodily symptoms predicts outcome more accurately than health anxiety in patients attending neurology, cardiology, and gastroenterology clinics. J Psychosom Res. 2006;60(4):357-63.
3. Creed FH, Davies I, Jackson J, Littlewood A, Chew-Graham C, Tomenson B, et al. The epidemiology of multiple somatic symptoms. J Psychosom Res. 2012;72(4):311-7.
4. Sunderland M, Newby JM, Andrews G. Health anxiety in Australia: prevalence, comorbidity, disability and service use. Br J Psychiatry. 2013;202(1):56-61.
5. Barsky AJ, Orav EJ, Bates DW. Somatization increases medical utilization and costs independent of psychiatric and medical comorbidity. Arch Gen Psychiatry. 2005;62(8):903-10.
6. Park J, Gilmour H. Medically unexplained physical symptoms (MUPS) among adults in Canada: Comorbidity, health care use and employment. Health Rep. 2017;28(3):3-8.
7. Creed F. The relationship between somatic symptoms, health anxiety, and outcome in medical out-patients. Psychiatr Clin North Am. 2011;34(3):545-64.
8. Afari N, Ahumada SM, Wright LJ, Mostoufi S, Golnari G, Reis V, et al. Psychological trauma and functional somatic syndromes: a systematic review and meta-analysis. Psychosom Med. 2014;76(1):2-11.
9. Creed F, Barsky A. A systematic review of the epidemiology of somatisation disorder and hypochondriasis. J Psychosom Res. 2004;56(4):391-408.
10. Eberhard-Gran M, Schei B, Eskild A. Somatic symptoms and diseases are more common in women exposed to violence. J Gen Intern Med. 2007;22(12):1668-73.
11. Paras ML, Murad MH, Chen LP, Goranson EN, Sattler AL, Colbenson KM, et al. Sexual abuse and lifetime diagnosis of somatic disorders: a systematic review and meta-analysis. Jama. 2009;302(5):550-61.

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12. Hahn SR, Thompson KS, Wills TA, Stern V, Budner NS. The difficult doctor-patient relationship: Somatization, personality and psychopathology. J Clin Epidemiol. 1994;47:647-57.

13. Kirmayer LJ, Groleau D, Looper KJ, Dao MD. Explaining medically unexplained symptoms. Can J Psychiatry. 2004;49(10):663-72.

14. Mills SEE, Nicolson KP, Smith BH. Chronic pain: a review of its epidemiology and associated factors in population-based studies. Br J Anaesth. 2019;123(2):e273-e83.

15. Stone L. Reframing chaos--a qualitative study of GPs managing patients with medically unexplained symptoms. Aust Fam Physician. 2013;42(7):501-2.

16. Peters S, Rogers A, Salmon P, Gask L, Dowrick C, Towey M, et al. What do patients choose to tell their doctors? Qualitative analysis of potential barriers to reattributing medically unexplained symptoms. J Gen Intern Med. 2009;24(4):443-9.

17. Hartz AJ, Noyes R, Bentler SE, Damiano PC, Willard JC, Momany ET. Unexplained symptoms in primary care: perspectives of doctors and patients. Gen Hosp Psychiatry. 2000;22(3):144-52.

18. Salmon P, Humphris GM, Ring A, Davies JC, Dowrick CF. Primary care consultations about medically unexplained symptoms: patient presentations and doctor responses that influence the probability of somatic intervention. Psychosom Med. 2007;69(6):571-7.

19. Hahn SR. Physical symptoms and physician-experienced difficulty in the physician-patient relationship. Ann Intern Med. 2001;134(9 (Part 2) Supplement):897-904.

20. Salmon P, Dowrick CF, Ring A, Humphris GM. Voiced but unheard agendas: qualitative analysis of the psychosocial cues that patients with unexplained symptoms present to general practitioners. Br J Gen Pract. 2004;54(500):171-6.

21. Salmon P, Peters S, Stanley I. Patients' perceptions of medical explanations for somatisation disorders: qualitative analysis. BMJ. 1999;318(7180):372-6.

22. Lian OS, Robson C. "It s incredible how much I ve had to fight." Negotiating medical uncertainty in clinical encounters. Int J Qual Stud Health Well-being. 2017;12(sup2):1392219.

23. Salmon P, Peters S, Clifford R, Iredale W, Gask L, Rogers A, et al. Why do general practitioners decline training to improve management of medically unexplained symptoms? J Gen Intern Med. 2007;22(5):565-71.

24. Chew-Graham C, May C. Chronic low back pain in general practice: the challenge of the consultation. Fam Pract. 1999;16(1):46-9.

25. Wileman L, May C, Chew-Graham CA. Medically unexplained symptoms and the problem of power in the primary care consultation: a qualitative study. Fam Pract. 2002;19(2):178-82.

26. Kroenke K, Spitzer RL, Williams JB, Lowe B. The Patient Health Questionnaire Somatic, Anxiety, and Depressive Symptom Scales: a systematic review. Gen Hosp Psychiatry. 2010;32(4):345-59.

27. Salkovskis PM, Rimes KA, Warwick HM, Clark DM. The Health Anxiety Inventory: development and validation of scales for the measurement of health anxiety and hypochondriasis. Psychol Med. 2002;32(5):843-53.

28. Watling CJ, Lingard L. Grounded theory in medical education research: AMEE Guide No. 70. Med Teach. 2012;34(10):850-61.

29. An PG, Rabatin JS, Manwell LB, Linzer M, Brown RL, Schwartz MD, et al. Burden of difficult encounters in primary care: data from the minimizing error, maximizing outcomes study. Arch Intern Med. 2009;169(4):410-4.

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30. Doebl S, Macfarlane GJ, Hollick RJ. "No one wants to look after the fibro patient". Understanding models, and patient perspectives, of care for fibromyalgia: reviews of current evidence. Pain. 2020;161(8):1716-25.

31. Illingworth R. What does 'patient-centred' mean in relation to the consultation? Clin Teach. 2010;7(2):116-20.

32. Stewart M, Brown JB, Weston WW, McWhinney IR, McWilliam CL, Freeman TR. Patient-Centered Medicine: Transforming the Clinical Method. Third ed. London: Radcliffe Publishing; 2014.

33. Harris M, Fallot RD, editors. Using Trauma-Informed Theory to Design Service Systems: Jossey-Bass/Wiley; 2001.

34. Linehan M. Skills Training Manual for Treating Borderline Personality Disorder. New York: Guilford Press; 1993 1993.

35. Porcerelli JH, Jones JR, Klamo R, Heeney R. Childhood abuse in adults in primary care: Empirical findings and clinical implications. Int J Psychiatry Med. 2017;52(3):265-76.

36. Levinson W, Roter DL, Mullooly JP, Dull VT, Frankel RM. Physician-patient communication. The relationship with malpractice claims among primary care physicians and surgeons. JAMA. 1997;277(7):553-9.

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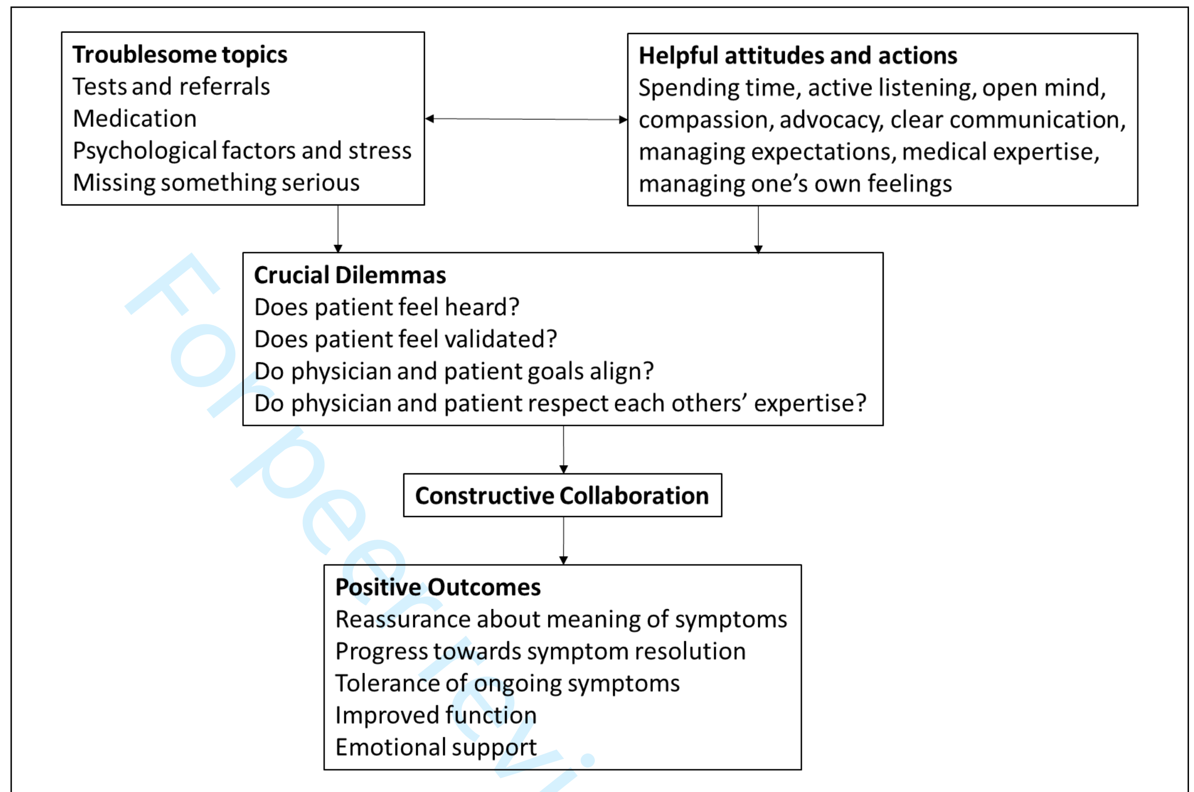
Figure 1. A model of interpersonal tension and collaboration for patients with high physical symptom burden or health anxiety in primary care.



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Standards for Reporting Qualitative Research (SRQR)*

http://www.equator-network.org/reporting-guidelines/srqr/

Title and abstract

	Page/line no(s).
Title - Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	p.1, line 1
Abstract - Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions	p.2, line 3

Introduction

	Page/line no(s).
Problem formulation - Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement	pp. 4-5
Purpose or research question - Purpose of the study and specific objectives or questions	pp.5, line 14

Methods

	Page/line no(s).
Qualitative approach and research paradigm - Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/ interpretivist) is also recommended; rationale**	p.5, line 19
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Ethical issues pertaining to human subjects - Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	p.6, line 12
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Data collection instruments and technologies - Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study	p.7, line 13
Units of study - Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	p.7, line 13
Data processing - Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/de-identification of excerpts	p.7, line 20
Data analysis - Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale**	p.7, line 20
Techniques to enhance trustworthiness - Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale**	p.8, line 5

Results/findings

Synthesis and interpretation - Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	p.8, line 16
Links to empirical data - Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings	p.9-17

Discussion

Integration with prior work, implications, transferability, and contribution(s) to the field - Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field	p.17-20
Limitations - Trustworthiness and limitations of findings	p.19, line 8

Other

Conflicts of interest - Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed	p.20
Funding - Sources of funding and other support; role of funders in data collection, interpretation, and reporting	p.20

*The authors created the SRQR by searching the literature to identify guidelines, reporting standards, and critical appraisal criteria for qualitative research; reviewing the reference lists of retrieved sources; and contacting experts to gain feedback. The SRQR aims to improve the transparency of all aspects of qualitative research by providing clear standards for reporting qualitative research.

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**The rationale should briefly discuss the justification for choosing that theory, approach, method, or technique rather than other options available, the assumptions and limitations implicit in those choices, and how those choices influence study conclusions and transferability. As appropriate, the rationale for several items might be discussed together.

Reference:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. **Standards for reporting qualitative research: a synthesis of recommendations.** *Academic Medicine*, Vol. 89, No. 9 / Sept 2014 DOI: 10.1097/ACM.0000000000000388

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Multiple Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

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Multiple Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

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Multiple Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

Abstract

Background Patients with multiple, persistent symptoms and health anxiety often report poor health outcomes. Patients who are difficult to reassure are challenging for family physicians. The therapeutic alliance between a physician and patient can influence the prognosis of these patients. Optimizing the quality of the physician-patient alliance may depend on a better understanding of the interpersonal processes that influence this relationship.

Objective The purpose of this study is to understand the experiences of patients who experience multiple persistent symptoms or high health anxiety and of their physicians when they interact.

Design, Participants and Setting We conducted a qualitative study using grounded theory of 18 patients, purposively sampled to select patients who reported high physical symptom severity, high health anxiety or both, and 7 family physicians in the same clinic. This study was conducted at a Family Medicine clinic in a teaching hospital.

Results A model of interpersonal tension and collaboration for patients and physicians in primary care was developed. Helpful attitudes and actions as well as troublesome topics influence crucial dilemmas between patients and physicians. These dilemmas include if patients feel heard and validated and the alignment of goals and mutual respect of expertise and experience between patients and physicians. These experiences contribute to a constructive collaboration and in turn positive outcomes.

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Conclusions This model of patient-physician interaction may facilitate providers to turn their attention away from the contentious topics and towards actions and attitudes that promote beneficial outcomes.

Strengths and limitations of this study

- Semi-structured interviews which allowed in-depth exploration of experiences were a strength
- It is a strength that both clinician and patient perspectives were elicited
- It is a strength that the analysis supported development of model that may inform clinical care
- Not interviewing patients and physicians in matched pairs was a limitation
- Conducting the study in one clinic in a teaching hospital is a limitation

Keywords family medicine, health anxiety, symptoms

Word count 4749

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Introduction

Primary care office visits by adults are, most often, for chronic conditions or new problems, which typically involve symptoms[1]. Persistent symptoms are associated with poorer outcomes as the number of symptoms increases[2] and when they are accompanied by health anxiety[3], which refers to preoccupation about disease and difficulty being reassured[4]. There is a substantial literature about the challenges of managing medically unexplained physical symptoms in primary care[5-8], but the emphasis on whether or not symptoms are adequately explained may be unnecessary, since multiple symptoms of any type (whether or not they are considered to be adequately explained) and high health anxiety are associated with more medical consultations, poorer physical functioning, higher psychiatric morbidity, and higher rates of outpatient visits and hospitalization[9,10]. Furthermore, specifying symptoms as physical or psychological is also complicated because many symptoms, such as pain, fatigue and insomnia, have both physical and psychological aspects. Thus, we focus on multiplicity of persistent symptoms and health anxiety, rather than on unexplained physical symptoms, but will also refer to prior studies of medically unexplained symptoms, which are studying a related phenomenon.

Although health anxiety and multiplicity of symptoms are related to one another, they are independently associated with poor outcomes[11]. Since each of these presentations is associated with outcomes that indicate high utilization and high burden, and because they often but not always co-occur, it is useful to consider them together as a challenging phenomenon in primary care. Correlates and antecedents of multiple and severe symptoms and health anxiety include being female, having experienced childhood

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adversity, anxiety disorders, depression, personal or family chronic illnesses, lower socioeconomic status, and other social stressors[3,12-15].

When symptoms are not readily diagnosed, treated and relieved, interactions been patients and physicians may become difficult[16]. They may disagree about the cause of symptoms and particularly about the relative contribution of physiological and psychological factors. Clinicians may refer to persistent, difficult to manage symptoms as resulting from somatization, which implies psychological pathology[9], and can result in the patient feeling invalidated or stigmatized. Kirmayer and colleagues suggest that these symptoms are “a social and clinical predicament, not a specific disorder” because they represent “a situation in which the meaning of distress is contested”[7].

Importantly, the therapeutic alliance between a physician and patient can influence the treatment and prognosis of patients in this situation[6]. A positive alliance can be challenging to achieve; patients report dissatisfaction with their care[17-19] and physicians often describe patients with unexplained symptoms as difficult and dissatisfying[18,20]. There is often a discrepancy between what patients expect and what they receive from their family doctor[21]. In one study, patients described their doctor’s explanations of the symptoms as rejecting the reality of their symptoms[22]. Patients also describe being caught in a power struggle with doctors and health systems[23]. From the doctors’ perspective, family doctors feel that they lack psychological training or skills to deal with these challenges[24]. They experience frustration, a sense of inadequacy, and powerlessness, and these responses influence clinical decision-making and the doctor-patient relationship[25,26].

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Although several of the factors that contribute to the phenomena of persistent symptoms and high health anxiety being frustrating for both patients and physicians are understood, the solution to these challenges is much less clear. Specifically, paths to optimizing the quality of physician-patient alliance may depend on a better understanding of the interpersonal processes that influence this relationship from the perspective of both patients and physicians. The purpose of this study is to understand the experiences of patients with high physical symptom burden or health anxiety and their family doctors when they interact with each other in a primary care setting. Our eventual goal is that understanding the overt and nuanced features of this relationship will support future efforts to improve this alliance.

Methods

We conducted a qualitative study using grounded theory to explore how interpersonal relationships between patients and family doctors influence the experience of care in the setting of multiple persistent symptoms and health anxiety. The research was conducted at the Granovsky Gluskin Family Medical Centre at Mount Sinai Hospital in Toronto, Canada, a single clinic which has about 45,000 patient visits annually. The family health team, which includes twelve staff physicians as well as residents, provides a full range of primary care services including general, preventive and acute care for all ages. Our research team provided diverse perspectives on the meaning of the data. The team included a family doctor, who is also a clinical teacher and developer of curriculum (EB), a child psychiatrist with extensive experience with medically unexplained symptoms (RG), an adult psychiatrist of patients with high symptom burden and health anxiety, who also researches the impact of interpersonal relationships on healthcare

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(RM), and research scientists specializing in the impact of interpersonal relationships on health behaviour (TL) and in how health professionals develop and maintain expertise (MM). This study was approved by the Mount Sinai Hospital Research Ethics Board. All participants provided written informed consent.

Participants and sampling

Participants were purposefully selected to explore how patient-physician interactions influence the experience of care for patients with multiple burdensome symptoms (without regard to whether or not these symptoms are explained by organic pathology) or health anxiety. Purposeful sampling deliberately selects participants who provide specific, information-rich perspectives on a phenomenon[27]. The optimal diversity of a purposeful sample is a function of the research question. In this case, the research question required the perspectives of primary care patients with multiple persistent symptoms, high health anxiety, or both, and of primary care physicians who treat such patients.

We recruited patients who had previously participated in a survey of childhood adversity, attachment insecurity, symptom severity and health anxiety[28]. Briefly, 712 patients were approached consecutively in the waiting room after checking in for an appointment. Of 647 meeting inclusion criteria (age ≥ 18 years and sufficient English skills to complete the survey), 234 declined to participate, 413 consented, and 351 returned a completed survey. The majority of the participants were white (66%) and had completed post-secondary education (68%). Multiplicity of burdensome symptoms was measured with the Patient Health Questionnaire- Physical Symptoms instrument (PHQ-

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15), in which patients score the degree they are bothered by 15 common symptoms (e.g. stomach pain, dizziness) for on a 3-point scale (0=not bothered at all; 1=bothered a little; 2= bothered a lot) during the past 7 days. A score of > 9 was used to indicate multiple burdensome symptoms [29]. Health anxiety was measured by the Short Health Anxiety Inventory which is comprised of 14 questions for which the participant chooses a statement (scored 1 to 4) that best describes their feelings over the past six months[30]. A score of > 17 was used to indicate high health anxiety[31].

We identified patients to participate in the current study from the pool of survey patients who had high physical symptom severity only (10% of survey participants), high health anxiety only (13%), or both (21%). Interview participants were not selected for age, gender or other demographic characteristics. Patient participants were invited to participate by email. Patients were recruited until thematic saturation was achieved in the concurrent analysis of interviews (N=18).

Physician participants were recruited from the twelve staff physicians via self-referral after notification of the study via email and team meetings. Every physician who volunteered (N=7) was interviewed. Physicians were interviewed without respect to whether or not they provided care to the specific patients who were interviewed.

Patient and Public Involvement

Key informants, including the authors, physician and nurse primary care providers from a non-teaching community hospital, and a team at that hospital who were developing a curriculum for continuing primary care education, informed the research question. Patients and the public were not involved in the design, recruitment or conduct

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of the study. A lay summary will be prepared for patient participants of the study and a grand rounds presentation was prepared for physician participants.

Data collection

Eighteen patients and seven physicians participated in individual, semi-structured interviews by one researcher (TL) from July to December 2019. Interviews were from 30 to 45 minutes long. The interview guide was developed with input from key informants and the consensus of the research group. Questions in the patient interview guide addressed the patient's experience of bothersome symptoms, their impression of their relationship with their doctor, examples of good appointments and challenging ones, health goals, and thoughts about how their doctor could help them achieve their goals. The physician interview began with a description of a prototypic patient who is difficult to reassure about persistent symptoms and asked them to reflect on interactions with similar patients. They were asked to describe their experiences in these interactions, their concerns, example of good and challenging appointments, their goals for the patient, and their impression of the patients' goals. Both interview guides were iteratively revised over the course of interviews to include themes developed through the analysis. In addition to responses to the interview guide questions, participants were invited to share any experience they thought was relevant. Data collection continued until we achieved theoretical saturation[32]. Interviews were anonymized, transcribed and analyzed concurrently with data collection.

Analysis

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Interview data was coded and categorized using NVivo 12.5 (QSR International, Burlington, MA, USA, 2020). An iterative, constant comparative approach of grounded theory was used to identify, analyze and report themes within the data[33] and to revise the interview guide as new themes were identified and explored. To provide a diversity of perspectives on the meaning of the data and how to label and define emerging themes, a key feature of thematic analysis is for several individuals to read and interpret the transcripts from the interviews. Two team members (TL, RM) reviewed the anonymized transcripts to organize data into themes. They coded the transcripts separately to identify concepts, key words and reflections, and then compared their results with the other members. After the first four patient interviews, the research team (RM, TL, MM, EB, RG) met to discuss coding themes. Member checking with key informants was used to revise the interview guide to include themes developed through the analysis. Researchers (TL, MM, RB) met during the further data collection to discuss and refine the coding framework and themes. The research team met again to review and refine the conceptual framework that evolved through the data analysis.

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Results

The patients interviewed included three men and fifteen women. They ranged in age from 22 to 70 years, with a median of 41 years. Four had high physical symptoms only, four had high health anxiety only and ten had both. The physicians included three men and four women. Their years of practice ranged from 2 to more than 40 years, with a median of 36 years.

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Both patients and doctors found that their interactions could be very frustrating. They identified three main themes about these interactions. First, they agreed about certain topics that commonly caused conflict. Second, they described interpersonal processes that were challenging, especially feeling heard or not, feeling validated or invalidated, and agreeing or disagreeing on goals. Managing these challenging interactions seemed important to the outcome. Finally, patients identified attitudes and actions that can be adopted by physicians to promote a positive resolution of tensions. Patients and physicians agreed that positive interactions support good outcomes.

Patients and physicians experienced mutually frustrating interactions

Both patients and doctors spoke of how frustrating their interactions could be.

At times I kind of secretly wish that maybe she would find another doctor because I do find our relationship so difficult... (Doctor 2)

They identified strong negative emotions and sometimes a lack of trust.

I was really annoyed with [doctor] about the MRI. That scared me, and I was so mad at her that I told her that if it turned out that it was a problem, I was going to sue her. I was so mad, because I did not trust her. (Patient 2)

Physicians described their frustration in terms of power struggles and no-win interactions.

I feel pushed into doing more tests than I would normally do which is frustrating but also worries me because you can always find some sort of suspicious finding in the tests... It's kind of a nightmare. (Doctor 1)

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Often these frustrating interactions were about certain common topics.

There were clearly identified 'troublesome topics' for patients and physicians

A small number of troublesome topics often led to conflict. The first of these was whether or not a patient needs tests or a referral. Several patients expressed a desire for investigations and referrals that was resisted by healthcare professionals.

One thing I'm trying to convince [the doctor] to do… I want to get a full body MRI done… I haven't sold him on that yet. (Patient 3)

Doctors were aware that over-investigation can be harmful. Some felt that giving in to pressure to investigate symptoms amplified tension in the clinical interaction.

Don't give in to all the tests and stuff they want… the more tests I ordered the more they were coming back and it didn't ease anything and make anything better. (Doctor 5)

Others felt that sometimes doing a test that is not strictly indicated was valuable for the purpose of reassurance.

The over-testing and over-referral… like we don't want to necessarily do that. But I recognize… helping them to live with that anxiety… sometimes may necessitate doing a test. (Doctor 4)

Some patients reported that the results of tests did not provide clarity.

I had every test done under the sun... Everything came back negative... Basically, I was left with, 'we can't figure out what's wrong with you.' (Patient 4)

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Another troublesome topic was the possibility of missing a serious disease because of attributing symptoms to anxiety. Both patients and doctors worried about this.

When patients present frequently with… symptoms that don't really fit a specific diagnosis… that can lead me to wonder if maybe I've missed something. (Doctor 2)

One doctor acknowledged that the concern over missing something serious and the patient's inability to be reassured were mutually reinforcing.

I find the patients who cannot be reassured very challenging because they tie into my own anxiety about missing things, and I feel that at the end of the visit often neither of us is satisfied. (Doctor 1)

Another troublesome topic was the possible role of psychological factors and stress contributing to symptoms. Some patients resist their doctor making a connection between current and past life stressors and their current symptoms.

I usually know that there are psychosocial roots for their ongoing health anxiety. I try to explore those areas and often I'm met with resistance. (Doctor 1)

Other patients saw clear links.

I think that mine is a chronic trauma from childhood, which for me… manifests bodily. I did have a very sensitive body, and I feel everything highly so I get stomach upset and heart palpitations at the slightest thing... (Patient 1)

Some doctors expressed a belief that a successful outcome depends on patients accepting the psychological roots of their current difficulties.

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I do think it's helping them try to get inside into their own symptoms… the primary goal which might be helping them make that connection between what's going on in their life and their symptoms. (Doctor 2)

Finally, prescription medication was often contentious. One common source of conflict was whether or not a patient would take psychiatric medication.

Well, since I staunchly do not want to take [psychiatric] medication, it's a little bit difficult for her to talk to me about it, because the area that she could help me with… I don't want anything to do with. (Patient 8)

Conflict also often arose over whether or not a doctor would prescribe medication to reduce symptoms, often pain.

Sometimes I'll go in and there's a med that I've used before… and I know it helps for a certain thing and they're like, no, we're not going to give it to you. (Patient 3)

While these troublesome topics provided the content for difficult interactions, it was the interpersonal process in these discussions that appeared to be crucial. In other words, troublesome topics provoked tensions or conflicts that challenged how patients and physician *interacted with* each other.

Troublesome topics often led to interpersonal challenges in the patient-physician relationship

Certain interpersonal challenges were identified: being heard or not, agreeing on goals, respecting each other's expertise and feeling validated or not.

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Patients consistently endorsed the importance of "feeling heard." When they did not feel heard, little else could be accomplished.

[The doctor] was very one-way... And I honestly walked out, because she wasn't listening to what I was saying. (Patient 10)

What asked what it meant to be heard, patients spoke both of their physician actually listening, and also of the shared understanding that resulted.

I feel he heard me... he really listens, understands, and knows you have a medical problem. (Patient 9)

Sometimes the evidence of being heard was that a physician remembers what has been said from one appointment to another.

She'll basically recap the last time that I saw her, and even saying little things that aren't necessarily things that she may have written down. (Patient 4)

Disagreeing on short-term goals was often related to the troublesome topics of medication or tests.

[I asked for an MRI] and she said, so, what's the reason for it? What's the point that you want to do this?... everything is a fight today. Anyway, I kind of just felt myself slump when she said that. (Patient 12)

One doctor described wanting to help a patient shift her goal from cure to optimal function.

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She's like once we get this cured I'm going to be back to normal. And I think… I hope that you do go back to your normal but you know, you've been this way for five years and unfortunately you haven't been able to go back full time yet... You want to be able to provide information that allows them to function as well as they can. (Doctor 6)

Patients and doctors discussed appreciating each other's goals and negotiating. For the patients, this was often explicitly linked to doctors listening.

[A doctor can provide the best possible care by] listening and taking in all the information, and then, I think, suggesting a plan. But then, also, asking what the patient feels the next step should be. (Patient 5)

Both patients and physicians wanted the other to respect their expertise. Patients want to be recognized as the experts of their own experience.

[What I want is] respecting me as a human being, respecting me as somebody who is an equal and knows my problems better than you do... (Patient 13)

Doctors do not want to compromise their medical expertise.

I think there is always that tension of wanting to preserve the doctor-patient relationship but not being prepared to do things or behave in ways that compromise your own sense of professional self. (Doctor 1)

Finally, physicians were challenged to help a patient feel validated: acknowledging the patient's perspective, reassuring them that their experiences are understandable, acknowledging progress and keeping the patient "in mind."

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I think the fact that she validates my challenges and doesn't tell me that I'm dreaming them up is extremely important... [but] if I'm over-thinking a situation, she'll tell me. She'll say, this is something that you don't need to be worried about. (Patient 13)

Invalidating experiences often result from dismissing a patient's concerns or perspective.

I couldn't walk very far because [I couldn't control my bowels]... And she said, oh, that's just ridiculous… So, I was really upset about it. (Patient 2)

A validating experience can be challenging to accomplish when patients are reluctant to speak about their needs or their fears.

I'd be too embarrassed to go make the appointment with the doctor, to say, I'm frightened of this medication or the impact that this mental illness is having on me, and I need reassurance… it would be humiliating. (Patient 7)

Fortunately, since the successful resolution of these interpersonal challenges is important, patients identified things that physicians can do to foster successful listening, validation, agreement on goals and respect of each other's' expertise.

Specific physician attitudes and actions promote successful resolution of interpersonal challenges

Patients identified a number of ways that physicians can influence interactions positively, including listening actively, communicating clearly, spending time, collaborating and providing advocacy.

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She definitely heard and she knew why I wanted [a test]. I knew why she didn't want to do it. Yes, I think we both heard each other… She's very easy to talk to. (Patient 12)

Physicians spoke about the benefits of managing expectations, and of collaborative negotiation.

Half of what we do is trying to understand… the patient's real concerns… what they expect… and then negotiating something sensible. (Doctor 3)

Patients also described positive experiences of negotiating goals.

I was like, I want to completely stop my medication. And he, kind of, said, maybe you shouldn't do that. It seems like they're working... But we've kind of worked on that, so lowered the dosage... (Patient 16)

Patients also appreciated physicians keeping an open mind, providing expertise, and allowing time.

When I went to see [doctor] last, I wanted to ask him about [antidepressants]… He didn't try to push anything on me… I was grateful that… I didn't get the sense of an ultimatum, or you have to do this. (Patient 7)

Constructive interactions demonstrated compassion and fostered trust.

She told me she trusts me... I think when they care about you, you care about yourself more too. (Patient 15)

Doctors and patients identified collaboration emerging out of good interactions and trust.

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At some point I think we created a bond enough that I felt comfortable enough to say 'Look. I know you're feeling these physical symptoms but… there is an underlying issue that's going on. Like how are you doing outside of here?... And then like the visit after that he just kind of brought up… his issues with his ex-partner.... And he's like you know what, after that relationship broke down that's when I started feeling all these things. (Doctor 5)

Discussion

Summary

The reports of these patients with high physical symptom burden and/or health anxiety and their family doctors suggest that both may find their interactions quite frustrating, often because of conflicts that arise from troublesome topics and which lead to challenging interpersonal interactions. They navigate interpersonal dilemmas in which patients experience themselves as well heard and validated or not, and doctors and patients find their goals align and their individual expertise is respected or not. Successful resolution of these dilemmas may represent progress from conflict over contentious topics to attention to the quality of interpersonal interactions and is facilitated by physician attitudes and actions, including spending time, active listening, keeping an open mind, showing compassion, providing advocacy, communicating clearly, and managing expectations, in addition to providing medical expertise. Success in dealing with these dilemmas is marked by collaborative interactions in which conflicts are negotiated, and differences of opinion are tolerated. We have mapped this sequence in a model (Figure 1).

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Comparison with existing literature

Our results converge with previous research showing that contentious topics include disagreement over the necessity of medications, patients with unrealistic expectations of care or vague complaints, or patients who do not follow advice, provide expected respect, or are time-consuming[16,34]. These difficulties are associated with physician burnout, stress and intent to leave one's practice[34]. On the patient's side of the interaction, tensions have previously been attributed to a professional having limited time, medications prescribed without discussion, poor continuity of care, and a focus on disease instead of the whole person[35]. Our study advances this understanding by suggesting that while these topics lead to conflict, they need not doom the interaction to a mutually frustrating stalemate. Attention to interpersonal *process*, rather than just the *content* of disagreement is helpful. Furthermore, attitudes and actions that are familiar to primary care physicians and core aspects of training in communication skills[36] foster collaboration and constructive interpersonal relationships in these challenging interactions.

The literature reviewed above suggests that each participant attributes the cause of difficulty to the other. One possible benefit of the model developed here is that it directs attention away from individual contributions to frustrating interactions, and towards interactive or relational aspects of these challenges. This observation aligns with patient-centered primary care that involves attention to the quality of the doctor-patient relationship, including attention to communication skills, empathy, and compassion[37,38]. The model is also consistent with approaches to care that emphasize the value of validating patients' perspectives in patient-centered[38] and trauma-informed

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care[39]. Validation of patient experiences and reports is also a key aspect of several psychotherapies that improve interpersonal functioning, especially dialectic-behavioral therapy[40]. Indeed, the formative benefits of parent-child interactions that are validating and the harms of early experiences that are invalidating may be a relevant antecedent, given the association between early life adversity and both unexplained symptoms and difficult medical encounters[12,14,15,41]. These associations suggest that invalidating clinical encounters for patients with high physical symptom burden and health anxiety may represent an "echo" of earlier developmental difficulties, and present a risk of re-injury for patients with such past experiences.

<u>Strengths and limitations</u>

The grounded theory method used in this study is able to describe the experiences of patients and doctors, including areas of conflict and contradiction (e.g. divergent views about the value of negative tests for reassurance), as they occur within the setting in which the study was conducted. Purposive sampling of patients with high physical health burden and health anxiety may increase the salience of participants' observations to others with similar concerns. In studies using grounded theory, transferability of the knowledge generated to other settings requires an appeal to sources of validation that are beyond the evidence provided in the study itself, such as the consistency of the model the study generated with other theoretical models. It is a strength of the model developed in this study is consistent with other frameworks that prioritize patient experience and attend to the quality of therapeutic relationships.

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Limitations of this study include interviewing physicians and patient who were not matched as provider-patient pairs, which could provide a more nuanced understanding of diverse perspectives on the same interactions. Our operational definition of multiple symptoms and/or high health anxiety is novel and evidence-based, and could be considered as strength. However, it limits comparability of the current study with prior studies of medically unexplained symptoms. Setting the study in a single clinic at teaching hospital and drawing participants from a sample with little racial diversity and a bias towards high education may limit the transferability of knowledge generated to other types of primary care settings. While the model that this study generated could guide future efforts in training and clinical practice, this study has not tested its utility.

Implications for research and/or practice

The model suggests that focusing on the content of conflictual topics leads to clinical deadlock, while prioritizing interpersonal process may provide opportunities for positive change. In the primary care setting, attention to interpersonal process requires a mix of patient-centered communication skills, especially asking about patients' concerns, priorities and values and listening actively to their responses, responding to patients' emotions, with genuine personal engagement and emotional involvement and engaging in shared decision making. These skills are well established in primary care[42] and so the model may promote a reminder to apply familiar skills at a time of interpersonal challenge, rather than a new intervention. Continuing education to refresh these skills using methods such as observed interviews or interactions with standardized patients[43] could be useful. That both patients and physicians find these interactions frustrating indicates that testing if such educational approaches could improve care is warranted.

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In summary, our data suggest that physicians' attitudes and actions, such as those that promote feelings of validation, may help overcome troublesome topics and lead to positive interactions and constructive collaboration between patients and physicians. One potential value of this model is that it may encourage clinicians to shift their focus away from those troublesome topics (content) and towards building trusting relationships with their patients (process). This study provides experiential observations of patients and doctors in family medicine that support that value of interpersonal skills and strategies in managing very common and challenging presentations of burdensome symptoms and high health anxiety.

Additional Information

Author Contribution: TL, RM, and MM designed the study. TLL, MM, EB, RG, RM performed the analyses. TL conducted the literature search and wrote the first draft of the manuscript. All authors contributed to and have approved the final manuscript.

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Ethical approval: This study was approved by the Mount Sinai Hospital Research Ethics Board.

Conflicts of Interests: None declared.

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References

1 Ashman JJ, Rui P, Okeyode T. Characteristics of Office-based Physician Visits, 2016. *NCHS Data Brief* 2019;:1–8.

2 Jackson J, Fiddler M, Kapur N, *et al.* Number of bodily symptoms predicts outcome more accurately than health anxiety in patients attending neurology, cardiology, and gastroenterology clinics. *J Psychosom Res* 2006;**60**:357–63. doi:10.1016/j.jpsychores.2006.02.006

3 Creed FH, Davies I, Jackson J, *et al.* The epidemiology of multiple somatic symptoms. *J Psychosom Res* 2012;**72**:311–7. doi:10.1016/j.jpsychores.2012.01.009

4 Sunderland M, Newby JM, Andrews G. Health anxiety in Australia: prevalence, comorbidity, disability and service use. *Br J Psychiatry* 2013;**202**:56–61. doi:10.1192/bjp.bp.111.103960

5 Stone L. Explaining the unexplainable - crafting explanatory frameworks for medically unexplained symptoms. *Aust Fam Physician* 2011;**40**:440–4.

6 Stone L. Reframing chaos--a qualitative study of GPs managing patients with medically unexplained symptoms. *Aust Fam Physician* 2013;**42**:501–2.

7 Kirmayer LJ, Groleau D, Looper KJ, *et al.* Explaining Medically Unexplained Symptoms. *Can J Psychiatry* 2016;**49**:663–72. doi:10.1177/070674370404901003

8 Kirmayer LJ, Groleau D, Looper KJ, *et al.* Explaining medically unexplained symptoms. *Can J Psychiatry* 2004;**49**:663–72. doi:10.1177/070674370404901003

9 Barsky AJ, Orav EJ, Bates DW. Somatization increases medical utilization and costs independent of psychiatric and medical comorbidity. *Archives of General Psychiatry* 2005;**62**:903–10. doi:10.1001/archpsyc.62.8.903

10 Park J, Gilmour H. Medically unexplained physical symptoms (MUPS) among adults in Canada: Comorbidity, health care use and employment. *Health Rep* 2017;**28**:3–8.

11 Creed F. The relationship between somatic symptoms, health anxiety, and outcome in medical out-patients. *Psychiatr Clin North Am* 2011;**34**:545–64.

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doi:10.1016/j.psc.2011.05.001

12 Afari N, Ahumada SM, Wright LJ, *et al.* Psychological Trauma and Functional Somatic Syndromes. *Psychosomatic Medicine* 2014;**76**:2–11. doi:10.1097/PSY.0000000000000010

13 Creed F, Barsky A. A systematic review of the epidemiology of somatisation disorder and hypochondriasis. *J Psychosom Res* 2004;**56**:391–408. doi:10.1016/S0022-3999(03)00622-6

14 Eberhard-Gran M, Schei B, Eskild A. Somatic Symptoms and Diseases are more Common in Women Exposed to Violence. *J GEN INTERN MED* 2007;**22**:1668–73. doi:10.1007/s11606-007-0389-8

15 Paras ML, Murad MH, Chen LP, *et al.* Sexual Abuse and Lifetime Diagnosis of Somatic Disorders: A Systematic Review and Meta-analysis. *JAMA* 2009;**302**:550–61.

16 Hahn SR, Thompson KS, Wills TA, *et al.* The difficult doctor-patient relationship: somatization, personality and psychopathology. *Journal of Clinical Epidemiology* 1994;**47**:647–57. doi:10.1016/0895-4356(94)90212-7

17 Peters S, Rogers A, Salmon P, *et al.* What Do Patients Choose to Tell Their Doctors? Qualitative Analysis of Potential Barriers to Reattributing Medically Unexplained Symptoms. *J GEN INTERN MED* 2008;**24**:443–9. doi:10.1007/s11606-008-0872-x

18 Hartz AJ, Noyes R, Bentler SE, *et al.* Unexplained symptoms in primary care: perspectives of doctors and patients. *General Hospital Psychiatry* 2000;**22**:144–52.

19 Salmon P, Humphris GM, Ring A, *et al.* Primary Care Consultations About Medically Unexplained Symptoms: Patient Presentations and Doctor Responses That Influence the Probability of Somatic Intervention. *Psychosomatic Medicine* 2007;**69**:571–7. doi:10.1097/PSY.0b013e3180cabc85

20 Hahn SR. Physical Symptoms and Physician-Experienced Difficulty in the Physician–Patient Relationship. *Ann Intern Med* 2001;**134**:897–904. doi:10.7326/0003-4819-134-9_Part_2-200105011-00014

21 Salmon P, Dowrick CF, Ring A, *et al.* Voiced but unheard agendas: qualitative analysis of the psychosocial cues that patients with unexplained symptoms present to general practitioners. *The British Journal of General Practice* 2004;**54**:171–6.

22 Salmon P, Peters S, Stanley I. Patients' perceptions of medical explanations for somatisation disorders: qualitative analysis. *The British Medical Journal* 1999;**318**:372–6.

23 Lian OS, Robson C. “It´s incredible how much I´ve had to fight.” Negotiating

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medical uncertainty in clinical encounters. *Int J Qual Stud Health Well-being* 2017;**12**:1–13. doi:10.1080/17482631.2017.1392219

24 Salmon P, Peters S, Clifford R, *et al.* Why do General Practitioners Decline Training to Improve Management of Medically Unexplained Symptoms? *J GEN INTERN MED* 2007;**22**:565–71. doi:10.1007/s11606-006-0094-z

25 Chew-Graham C, May C. Chronic low back pain in general practice: the challenge of the consultation. *Family Practice* 1999;**16**:46–9.

26 Wileman L, May C, Chew-Graham CA. Medically unexplained symptoms and the problem of power in the primary care consultation: a qualitative study. *Family Practice* 2002;**19**:178–82.

27 Palinkas LA, Horwitz SM, Green CA, *et al.* Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research* 2015;:1–12. doi:10.1007/s10488-013-0528-y

28 Le TL, Geist R, Bearss E, *et al.* Childhood adversity and attachment anxiety predict adult symptom severity and health anxiety. *Child Abuse & Neglect* 2021;**120**:105216. doi:10.1016/j.chiabu.2021.105216

29 Kroenke K, Spitzer RL, Williams JBW, *et al.* The Patient Health Questionnaire Somatic, Anxiety, and Depressive Symptom Scales: a systematic review. *General Hospital Psychiatry* 2010;**32**:345–59. doi:10.1016/j.genhosppsych.2010.03.006

30 Salkovskis PM, Rimes KA, Warwick HMC, *et al.* The Health Anxiety Inventory: development and validation of scales for the measurement of health anxiety and hypochondriasis. *Psychological Medicine* 2002;**32**:843–53. doi:10.1017/S0033291702005822

31 Rode S, Salkovskis P, Dowd H, *et al.* Health anxiety levels in chronic pain clinic attenders. *J Psychosom Res* 2006;**60**:155–61. doi:10.1016/j.jpsychores.2005.07.005

32 Watling CJ, Lingard L. Grounded theory in medical education research: AMEE Guide No. 70. *Med Teach* 2012;**34**:850–61. doi:10.3109/0142159X.2012.704439

33 Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006;**3**:77–101. doi:10.1191/1478088706qp063oa

34 An PG, Rabatin JS, Manwell LB, *et al.* Burden of difficult encounters in primary care: data from the minimizing error, maximizing outcomes study. *Archives of Internal Medicine* 2009;**169**:410–4. doi:10.1001/archinternmed.2008.549

35 Doebl S, Macfarlane GJ, Hollick RJ. “No one wants to look after the fibro patient.” Understanding models, and patient perspectives, of care for fibromyalgia: reviews of current evidence. *Pain* 2020;**161**:1716–25. doi:10.1097/j.pain.0000000000001870

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36 Beck RS, Daughtridge R, Sloane PD. Physician-patient communication in the primary care office: a systematic review. *J Am Board Fam Pract* 2002;**15**:25–38.

37 Illingworth R. What does “patient-centred” mean in relation to the consultation? *Clin Teach* 2010;**7**:116–20. doi:10.1111/j.1743-498X.2010.00367.x

38 Stewart M, Brown JB, Weston WW, *et al. Patient-centered Medicine, Transforming the Clinical Method (2nd edition)*. Radcliffe Medical Press 2003.

39 Harris M, Fallot RD. *Using Trauma-Informed Theory to Design Service Systems*. Jossey-Bass/Wiley 2001.

40 Linehan M. *Skills training manual for treating borderline personality disorder*. Guildford Press 1993.

41 Porcerelli JH, Jones JR, Klamo R, *et al.* Childhood abuse in adults in primary care: Empirical findings and clinical implications. *Int J Psychiatry Med* 2017;**52**:265–76. doi:10.1177/0091217417730290

42 Levinson W, Roter DL, Mullooly JP, *et al.* Physician-patient communication. The relationship with malpractice claims among primary care physicians and surgeons. *JAMA* 1997;**277**:553–9. doi:10.1001/jama.277.7.553

43 Ravitz P, Lancee WJ, Lawson A, *et al.* Improving physician-patient communication through coaching of simulated encounters. *Acad Psychiatry* 2013;**37**:87–93. doi:10.1176/appi.ap.11070138

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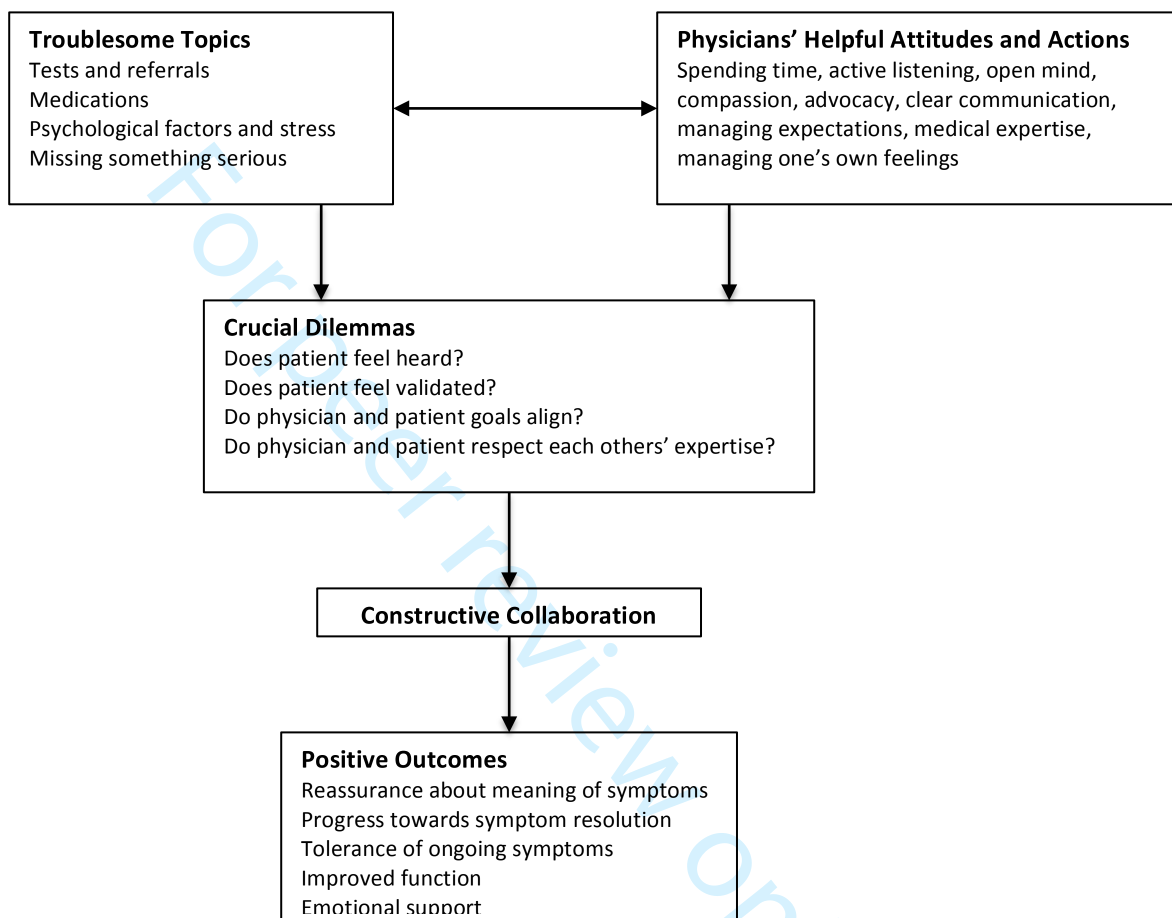
Figure 1. A model of interpersonal tension and collaboration for patients with high physical symptom burden or health anxiety in primary care.



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Page/line no(s).

Title and abstract

Title - Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	p.1, line 1
Abstract - Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions	p.2, line 3

Introduction

Problem formulation - Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement	pp. 4-5
Purpose or research question - Purpose of the study and specific objectives or questions	pp.5, line 14

Methods

Qualitative approach and research paradigm - Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/ interpretivist) is also recommended; rationale**	p.5, line 19
Researcher characteristics and reflexivity - Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability	p.6, line 4
Context - Setting/site and salient contextual factors; rationale**	p.5, line 20
Sampling strategy - How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale**	p.6, line 13
Ethical issues pertaining to human subjects - Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	p.6, line 12
Data collection methods - Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale**	p.7, line 10

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Data collection instruments and technologies - Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study	p.7, line 13
Units of study - Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	p.7, line 13
Data processing - Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/de-identification of excerpts	p.7, line 20
Data analysis - Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale**	p.7, line 20
Techniques to enhance trustworthiness - Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale**	p.8, line 5

Results/findings

Synthesis and interpretation - Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	p.8, line 16
Links to empirical data - Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings	p.9-17

Discussion

Integration with prior work, implications, transferability, and contribution(s) to the field - Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field	p.17-20
Limitations - Trustworthiness and limitations of findings	p.19, line 8

Other

Conflicts of interest - Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed	p.20
Funding - Sources of funding and other support; role of funders in data collection, interpretation, and reporting	p.20

*The authors created the SRQR by searching the literature to identify guidelines, reporting standards, and critical appraisal criteria for qualitative research; reviewing the reference lists of retrieved sources; and contacting experts to gain feedback. The SRQR aims to improve the transparency of all aspects of qualitative research by providing clear standards for reporting qualitative research.

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**The rationale should briefly discuss the justification for choosing that theory, approach, method, or technique rather than other options available, the assumptions and limitations implicit in those choices, and how those choices influence study conclusions and transferability. As appropriate, the rationale for several items might be discussed together.

Reference:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. **Standards for reporting qualitative research: a synthesis of recommendations.** *Academic Medicine*, Vol. 89, No. 9 / Sept 2014 DOI: 10.1097/ACM.0000000000000388

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Multiple Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

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Primary Subject Heading:	General practice / Family practice
Secondary Subject Heading:	Qualitative research
Keywords:	QUALITATIVE RESEARCH, PSYCHIATRY, MENTAL HEALTH

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Multiple Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

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Multiple Symptoms and Health Anxiety in Primary Care: A Qualitative Study of Tensions and Collaboration between Patients and Family Doctors

Abstract

Background Patients with multiple, persistent symptoms and health anxiety often report poor health outcomes. Patients who are difficult to reassure are challenging for family physicians. The therapeutic alliance between a physician and patient can influence the prognosis of these patients. Optimizing the quality of the physician-patient alliance may depend on a better understanding of the interpersonal processes that influence this relationship.

Objective The purpose of this study is to understand the experiences of patients who experience multiple persistent symptoms or high health anxiety and of their physicians when they interact.

Design, Participants and Setting We conducted a qualitative study using grounded theory of 18 patients, purposively sampled to select patients who reported high physical symptom severity, high health anxiety or both, and 7 family physicians in the same clinic. This study was conducted at a Family Medicine clinic in a teaching hospital.

Results A model of interpersonal tension and collaboration for patients and physicians in primary care was developed. Helpful attitudes and actions as well as troublesome topics influence crucial dilemmas between patients and physicians. These dilemmas include if patients feel heard and validated and the alignment of goals and mutual respect of expertise and experience between patients and physicians. These experiences contribute to a constructive collaboration and in turn positive outcomes.

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Conclusions This model of patient-physician interaction may facilitate providers to turn their attention away from the contentious topics and towards actions and attitudes that promote beneficial outcomes.

Strengths and limitations of this study

- Semi-structured interviews which allowed in-depth exploration of experiences were a strength
- It is a strength that both clinician and patient perspectives were elicited
- It is a strength that the analysis supported development of model that may inform clinical care
- Not interviewing patients and physicians in matched pairs was a limitation
- Conducting the study in one clinic in a teaching hospital is a limitation

Keywords family medicine, health anxiety, symptoms

Word count 4705

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Introduction

Primary care office visits by adults are, most often, for chronic conditions or new problems, which typically involve symptoms[1]. Persistent symptoms are associated with poorer outcomes as the number of symptoms increases[2] and when they are accompanied by health anxiety[3], which refers to preoccupation about disease and difficulty being reassured[4]. There is a substantial literature about the challenges of managing medically unexplained physical symptoms in primary care[5-8], but the emphasis on whether or not symptoms are adequately explained may be unnecessary, since multiple symptoms of any type (whether or not they are considered to be adequately explained) and high health anxiety are associated with more medical consultations, poorer physical functioning, higher psychiatric morbidity, and higher rates of outpatient visits and hospitalization[9,10]. Furthermore, specifying symptoms as physical or psychological is also complicated because many symptoms, such as pain, fatigue and insomnia, have both physical and psychological aspects. Thus, we focus on multiplicity of persistent symptoms and health anxiety, rather than on unexplained physical symptoms, but will also refer to prior studies of medically unexplained symptoms, which are studying a related phenomenon.

Although health anxiety and multiplicity of symptoms are related to one another, they are independently associated with poor outcomes[11]. Since each of these presentations is associated with outcomes that indicate high utilization and high burden, and because they often but not always co-occur, it is useful to consider them together as a challenging phenomenon in primary care. Correlates and antecedents of multiple and severe symptoms and health anxiety include being female, having experienced childhood

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adversity, anxiety disorders, depression, personal or family chronic illnesses, lower socioeconomic status, and other social stressors[3,12-15].

When symptoms are not readily diagnosed, treated and relieved, interactions been patients and physicians may become difficult[16]. They may disagree about the cause of symptoms and particularly about the relative contribution of physiological and psychological factors. Clinicians may refer to persistent, difficult to manage symptoms as resulting from somatization, which implies psychological pathology[9], and can result in the patient feeling invalidated or stigmatized. Kirmayer and colleagues suggest that these symptoms are “a social and clinical predicament, not a specific disorder” because they represent “a situation in which the meaning of distress is contested”[7].

Importantly, the therapeutic alliance between a physician and patient can influence the treatment and prognosis of patients in this situation[6]. A positive alliance can be challenging to achieve; patients report dissatisfaction with their care[17-19] and physicians often describe patients with unexplained symptoms as difficult and dissatisfying[18,20]. There is often a discrepancy between what patients expect and what they receive from their family doctor[21]. In one study, patients described their doctor’s explanations of the symptoms as rejecting the reality of their symptoms[22]. Patients also describe being caught in a power struggle with doctors and health systems[23]. From the doctors’ perspective, family doctors feel that they lack psychological training or skills to deal with these challenges[24]. They experience frustration, a sense of inadequacy, and powerlessness, and these responses influence clinical decision-making and the doctor-patient relationship[25,26].

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Although several of the factors that contribute to the phenomena of persistent symptoms and high health anxiety being frustrating for both patients and physicians are understood, the solution to these challenges is much less clear. Specifically, paths to optimizing the quality of physician-patient alliance may depend on a better understanding of the interpersonal processes that influence this relationship from the perspective of both patients and physicians. The purpose of this study is to understand the experiences of patients with high physical symptom burden or health anxiety and their family doctors when they interact with each other in a primary care setting. Our eventual goal is that understanding the overt and nuanced features of this relationship will support future efforts to improve this alliance.

Methods

We conducted a qualitative study using grounded theory to explore how interpersonal relationships between patients and family doctors influence the experience of care in the setting of multiple persistent symptoms and health anxiety. The research was conducted at the Granovsky Gluskin Family Medical Centre at Mount Sinai Hospital in Toronto, Canada, a single clinic which has about 45,000 patient visits annually. The family health team, which includes twelve staff physicians as well as residents, provides a full range of primary care services including general, preventive and acute care for all ages. Our research team provided diverse perspectives on the meaning of the data. The team included a family doctor, who is also a clinical teacher and developer of curriculum (EB), a child psychiatrist with extensive experience with medically unexplained symptoms (RG), an adult psychiatrist of patients with high symptom burden and health anxiety, who also researches the impact of interpersonal relationships on healthcare

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(RM), and research scientists specializing in the impact of interpersonal relationships on health behaviour (TL) and in how health professionals develop and maintain expertise (MM). This study was approved by the Mount Sinai Hospital Research Ethics Board. All participants provided written informed consent.

Participants and sampling

Participants were purposefully selected to explore how patient-physician interactions influence the experience of care for patients with multiple burdensome symptoms (without regard to whether or not these symptoms are explained by organic pathology) or health anxiety. Purposeful sampling deliberately selects participants who provide specific, information-rich perspectives on a phenomenon[27]. The optimal diversity of a purposeful sample is a function of the research question. In this case, the research question required the perspectives of primary care patients with multiple persistent symptoms, high health anxiety, or both, and of primary care physicians who treat such patients.

We recruited patients who had previously participated in a survey of childhood adversity, attachment insecurity, symptom severity and health anxiety[28]. Briefly, 712 patients were approached consecutively in the waiting room after checking in for an appointment. Of 647 meeting inclusion criteria (age ≥ 18 years and sufficient English skills to complete the survey), 234 declined to participate, 413 consented, and 351 returned a completed survey. The majority of the participants were white (66%) and had completed post-secondary education (68%). Multiplicity of burdensome symptoms was measured with the Patient Health Questionnaire- Physical Symptoms instrument (PHQ-

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15), in which patients score the degree they are bothered by 15 common symptoms (e.g. stomach pain, dizziness) for on a 3-point scale (0=not bothered at all; 1=bothered a little; 2= bothered a lot) during the past 7 days. A score of > 9 was used to indicate multiple burdensome symptoms [29]. Health anxiety was measured by the Short Health Anxiety Inventory which is comprised of 14 questions for which the participant chooses a statement (scored 1 to 4) that best describes their feelings over the past six months[30]. A score of > 17 was used to indicate high health anxiety[31].

We identified patients to participate in the current study from the pool of survey patients who had high physical symptom severity only (10% of survey participants), high health anxiety only (13%), or both (21%). Interview participants were not selected for age, gender or other demographic characteristics. Thirty-four patient participants were invited to participate by email. Patients were recruited until thematic saturation was achieved in the concurrent analysis of interviews (N=18, 53% participation rate).

Physician participants were recruited from the twelve staff physicians via self-referral after notification of the study via email and team meetings. Every physician who volunteered (N=7) was interviewed. Physicians were interviewed without respect to whether or not they provided care to the specific patients who were interviewed.

Patient and Public Involvement

Key informants, including the authors, physician and nurse primary care providers from a non-teaching community hospital, and a team at that hospital who were developing a curriculum for continuing primary care education, informed the research question. Patients and the public were not involved in the design, recruitment or conduct

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of the study. A lay summary will be prepared for patient participants of the study and a grand rounds presentation was prepared for physician participants.

Data collection

Eighteen patients and seven physicians participated in individual, semi-structured interviews by one researcher (TL) from July to December 2019. Interviews were from 30 to 45 minutes long. The interview guide was developed with input from key informants and the consensus of the research group. Questions in the patient interview guide addressed the patient's experience of bothersome symptoms, their impression of their relationship with their doctor, examples of good appointments and challenging ones, health goals, and thoughts about how their doctor could help them achieve their goals. The physician interview began with a description of a prototypic patient who is difficult to reassure about persistent symptoms and asked them to reflect on interactions with similar patients. They were asked to describe their experiences in these interactions, their concerns, example of good and challenging appointments, their goals for the patient, and their impression of the patients' goals. Both interview guides were iteratively revised over the course of interviews to include themes developed through the analysis. In addition to responses to the interview guide questions, participants were invited to share any experience they thought was relevant. Data collection continued until we achieved theoretical saturation[32]. Interviews were anonymized, transcribed and analyzed concurrently with data collection.

Analysis

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Interview data was coded and categorized using NVivo 12.5 (QSR International, Burlington, MA, USA, 2020). An iterative, constant comparative approach of grounded theory was used to identify, analyze and report themes within the data[33] and to revise the interview guide as new themes were identified and explored. To provide a diversity of perspectives on the meaning of the data and how to label and define emerging themes, a key feature of thematic analysis is for several individuals to read and interpret the transcripts from the interviews. Two team members (TL, RM) reviewed the anonymized transcripts to organize data into themes. They coded the transcripts separately to identify concepts, key words and reflections, and then compared their results with the other members. After the first four patient interviews, the research team (RM, TL, MM, EB, RG) met to discuss coding themes. Member checking with key informants was used to revise the interview guide to include themes developed through the analysis. Researchers (TL, MM, RB) met during the further data collection to discuss and refine the coding framework and themes. The research team met again to review and refine the conceptual framework that evolved through the data analysis.

Results

The patients interviewed included three men and fifteen women. They ranged in age from 22 to 70 years, with a median of 41 years. Four had high physical symptoms only, four had high health anxiety only and ten had both. The physicians included three men and four women. Their years of practice ranged from 2 to more than 40 years, with a median of 36 years.

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Overall, both patient and doctor participants found that their interactions could be very frustrating. We identified three main themes about these interactions. First, the participants agreed on certain topics that commonly caused conflict. Second, they described interpersonal processes that were challenging, especially feeling heard or not, feeling validated or invalidated, and agreeing or disagreeing on goals. Managing these challenging interactions seemed important to the outcome. Finally, patients identified attitudes and actions that can be adopted by physicians to promote a positive resolution of tensions. Patients and physicians agreed that positive interactions support good outcomes.

Patients and physicians experienced mutually frustrating interactions

Both patients and doctors spoke of how frustrating their interactions could be.

At times I kind of secretly wish that maybe she would find another doctor because I do find our relationship so difficult... (Doctor 2)

They identified strong negative emotions and sometimes a lack of trust.

I was really annoyed with [doctor] about the MRI. That scared me, and I was so mad at her that I told her that if it turned out that it was a problem, I was going to sue her. I was so mad, because I did not trust her. (Patient 2)

Physicians described their frustration in terms of power struggles and no-win interactions.

I feel pushed into doing more tests than I would normally do which is frustrating but also worries me because you can always find some sort of suspicious finding in the tests... It's kind of a nightmare. (Doctor 1)

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Often these frustrating interactions were about certain common topics.

There were clearly identified 'troublesome topics' for patients and physicians

A small number of troublesome topics often led to conflict. The first of these was whether or not a patient needs tests or a referral. Several patients expressed a desire for investigations and referrals that was resisted by healthcare professionals.

One thing I'm trying to convince [the doctor] to do… I want to get a full body MRI done… I haven't sold him on that yet. (Patient 3)

Doctors were aware that over-investigation can be harmful. Some felt that giving in to pressure to investigate symptoms amplified tension in the clinical interaction.

Don't give in to all the tests and stuff they want… the more tests I ordered the more they were coming back and it didn't ease anything and make anything better. (Doctor 5)

Others felt that sometimes doing a test that is not strictly indicated was valuable for the purpose of reassurance.

The over-testing and over-referral… like we don't want to necessarily do that. But I recognize… helping them to live with that anxiety… sometimes may necessitate doing a test. (Doctor 4)

Some patients reported that the results of tests did not provide clarity.

I had every test done under the sun... Everything came back negative... Basically, I was left with, 'we can't figure out what's wrong with you.' (Patient 4)

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Another troublesome topic was the possibility of missing a serious disease because of attributing symptoms to anxiety. Both patients and doctors worried about this.

When patients present frequently with… symptoms that don't really fit a specific diagnosis… that can lead me to wonder if maybe I've missed something. (Doctor 2)

One doctor acknowledged that the concern over missing something serious and the patient's inability to be reassured were mutually reinforcing.

I find the patients who cannot be reassured very challenging because they tie into my own anxiety about missing things, and I feel that at the end of the visit often neither of us is satisfied. (Doctor 1)

Another troublesome topic was the possible role of psychological factors and stress contributing to symptoms. Some patients resist their doctor making a connection between current and past life stressors and their current symptoms.

I usually know that there are psychosocial roots for their ongoing health anxiety. I try to explore those areas and often I'm met with resistance. (Doctor 1)

Other patients saw clear links.

I think that mine is a chronic trauma from childhood, which for me… manifests bodily. I did have a very sensitive body, and I feel everything highly so I get stomach upset and heart palpitations at the slightest thing... (Patient 1)

Some doctors expressed a belief that a successful outcome depends on patients accepting the psychological roots of their current difficulties.

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I do think it's helping them try to get inside into their own symptoms… the primary goal which might be helping them make that connection between what's going on in their life and their symptoms. (Doctor 2)

Finally, prescription medication was often contentious. One common source of conflict was whether or not a patient would take psychiatric medication.

Well, since I staunchly do not want to take [psychiatric] medication, it's a little bit difficult for her to talk to me about it, because the area that she could help me with… I don't want anything to do with. (Patient 8)

Conflict also often arose over whether or not a doctor would prescribe medication to reduce symptoms, often pain.

Sometimes I'll go in and there's a med that I've used before… and I know it helps for a certain thing and they're like, no, we're not going to give it to you. (Patient 3)

While these troublesome topics provided the content for difficult interactions, it was the interpersonal process in these discussions that appeared to be crucial. In other words, troublesome topics provoked tensions or conflicts that challenged how patients and physician *interacted with* each other.

Troublesome topics often led to interpersonal challenges in the patient-physician relationship

Certain interpersonal challenges were identified: being heard or not, agreeing on goals, respecting each other's expertise and feeling validated or not.

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Patients consistently endorsed the importance of "feeling heard." When they did not feel heard, little else could be accomplished.

[The doctor] was very one-way... And I honestly walked out, because she wasn't listening to what I was saying. (Patient 10)

What asked what it meant to be heard, patients spoke both of their physician actually listening, and also of the shared understanding that resulted.

I feel he heard me... he really listens, understands, and knows you have a medical problem. (Patient 9)

Sometimes the evidence of being heard was that a physician remembers what has been said from one appointment to another.

She'll basically recap the last time that I saw her, and even saying little things that aren't necessarily things that she may have written down. (Patient 4)

Disagreeing on short-term goals was often related to the troublesome topics of medication or tests.

[I asked for an MRI] and she said, so, what's the reason for it? What's the point that you want to do this?... everything is a fight today. Anyway, I kind of just felt myself slump when she said that. (Patient 12)

One doctor described wanting to help a patient shift her goal from cure to optimal function.

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She's like once we get this cured I'm going to be back to normal. And I think… I hope that you do go back to your normal but you know, you've been this way for five years and unfortunately you haven't been able to go back full time yet... You want to be able to provide information that allows them to function as well as they can. (Doctor 6)

Patients and doctors discussed appreciating each other's goals and negotiating. For the patients, this was often explicitly linked to doctors listening.

[A doctor can provide the best possible care by] listening and taking in all the information, and then, I think, suggesting a plan. But then, also, asking what the patient feels the next step should be. (Patient 5)

Both patients and physicians wanted the other to respect their expertise. Patients want to be recognized as the experts of their own experience.

[What I want is] respecting me as a human being, respecting me as somebody who is an equal and knows my problems better than you do... (Patient 13)

Doctors do not want to compromise their medical expertise.

I think there is always that tension of wanting to preserve the doctor-patient relationship but not being prepared to do things or behave in ways that compromise your own sense of professional self. (Doctor 1)

Finally, physicians were challenged to help a patient feel validated: acknowledging the patient's perspective, reassuring them that their experiences are understandable, acknowledging progress and keeping the patient "in mind."

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I think the fact that she validates my challenges and doesn't tell me that I'm dreaming them up is extremely important... [but] if I'm over-thinking a situation, she'll tell me. She'll say, this is something that you don't need to be worried about. (Patient 13)

Invalidating experiences often result from dismissing a patient's concerns or perspective.

I couldn't walk very far because [I couldn't control my bowels]... And she said, oh, that's just ridiculous… So, I was really upset about it. (Patient 2)

A validating experience can be challenging to accomplish when patients are reluctant to speak about their needs or their fears.

I'd be too embarrassed to go make the appointment with the doctor, to say, I'm frightened of this medication or the impact that this mental illness is having on me, and I need reassurance… it would be humiliating. (Patient 7)

Fortunately, since the successful resolution of these interpersonal challenges is important, patients identified things that physicians can do to foster successful listening, validation, agreement on goals and respect of each other's' expertise.

Specific physician attitudes and actions promote successful resolution of interpersonal challenges

Patients identified a number of ways that physicians can influence interactions positively, including listening actively, communicating clearly, spending time, collaborating and providing advocacy.

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She definitely heard and she knew why I wanted [a test]. I knew why she didn't want to do it. Yes, I think we both heard each other… She's very easy to talk to. (Patient 12)

Physicians spoke about the benefits of managing expectations, and of collaborative negotiation.

Half of what we do is trying to understand… the patient's real concerns… what they expect… and then negotiating something sensible. (Doctor 3)

Patients also described positive experiences of negotiating goals.

I was like, I want to completely stop my medication. And he, kind of, said, maybe you shouldn't do that. It seems like they're working... But we've kind of worked on that, so lowered the dosage... (Patient 16)

Patients also appreciated physicians keeping an open mind, providing expertise, and allowing time.

When I went to see [doctor] last, I wanted to ask him about [antidepressants]… He didn't try to push anything on me… I was grateful that… I didn't get the sense of an ultimatum, or you have to do this. (Patient 7)

Constructive interactions demonstrated compassion and fostered trust.

She told me she trusts me... I think when they care about you, you care about yourself more too. (Patient 15)

Doctors and patients identified collaboration emerging out of good interactions and trust.

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At some point I think we created a bond enough that I felt comfortable enough to say 'Look. I know you're feeling these physical symptoms but… there is an underlying issue that's going on. Like how are you doing outside of here?... And then like the visit after that he just kind of brought up… his issues with his ex-partner.... And he's like you know what, after that relationship broke down that's when I started feeling all these things. (Doctor 5)

Discussion

Summary

The reports of these patients with high physical symptom burden and/or health anxiety and their family doctors suggest that both may find their interactions quite frustrating, often because of conflicts that arise from troublesome topics and which lead to challenging interpersonal interactions. They navigate interpersonal dilemmas in which patients experience themselves as well heard and validated or not, and doctors and patients find their goals align and their individual expertise is respected or not. Successful resolution of these dilemmas may represent progress from conflict over contentious topics to attention to the quality of interpersonal interactions and is facilitated by physician attitudes and actions, including spending time, active listening, keeping an open mind, showing compassion, providing advocacy, communicating clearly, and managing expectations, in addition to providing medical expertise. Success in dealing with these dilemmas is marked by collaborative interactions in which conflicts are negotiated, and differences of opinion are tolerated. We have mapped this sequence in a model (Figure 1).

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Comparison with existing literature

Our results converge with previous research showing that contentious topics include disagreement over the necessity of medications, patients with unrealistic expectations of care or vague complaints, or patients who do not follow advice, provide expected respect, or are time-consuming[16,34]. These difficulties are associated with physician burnout, stress and intent to leave one's practice[34]. On the patient's side of the interaction, tensions have previously been attributed to a professional having limited time, medications prescribed without discussion, poor continuity of care, and a focus on disease instead of the whole person[35]. Our study advances this understanding by suggesting that while these topics lead to conflict, they need not doom the interaction to a mutually frustrating stalemate. Attention to interpersonal *process*, rather than just the *content* of disagreement is helpful. Furthermore, attitudes and actions that are familiar to primary care physicians and core aspects of training in communication skills[36] foster collaboration and constructive interpersonal relationships in these challenging interactions.

The literature reviewed above suggests that each participant attributes the cause of difficulty to the other. One possible benefit of the model developed here is that it directs attention away from individual contributions to frustrating interactions, and towards interactive or relational aspects of these challenges. This observation aligns with patient-centered primary care that involves attention to the quality of the doctor-patient relationship, including attention to communication skills, empathy, and compassion[37,38]. The model is also consistent with approaches to care that emphasize the value of validating patients' perspectives in patient-centered[38] and trauma-informed

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care[39]. Validation of patient experiences and reports is also a key aspect of several psychotherapies that improve interpersonal functioning, especially dialectic-behavioral therapy[40]. Indeed, the formative benefits of parent-child interactions that are validating and the harms of early experiences that are invalidating may be a relevant antecedent, given the association between early life adversity and both unexplained symptoms and difficult medical encounters[12,14,15,41]. These associations suggest that invalidating clinical encounters for patients with high physical symptom burden and health anxiety may represent an "echo" of earlier developmental difficulties, and present a risk of re-injury for patients with such past experiences.

Strengths and limitations

The grounded theory method used in this study is able to describe the experiences of patients and doctors, including areas of conflict and contradiction (e.g. divergent views about the value of negative tests for reassurance), as they occur within the setting in which the study was conducted. Purposive sampling of patients with high physical health burden and health anxiety may increase the salience of participants' observations to others with similar concerns. In studies using grounded theory, transferability of the knowledge generated to other settings requires an appeal to sources of validation that are beyond the evidence provided in the study itself, such as the consistency of the model the study generated with other theoretical models. A strength of the model developed in this study is that it reflects other frameworks that prioritize patient experience and attend to the quality of therapeutic relationships.

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Limitations of this study include interviewing physicians and patient who were not matched as provider-patient pairs, which could provide a more nuanced understanding of diverse perspectives on the same interactions. Our operational definition of multiple symptoms and/or high health anxiety is novel and evidence-based, and could be considered as strength. However, it limits comparability of the current study with prior studies of medically unexplained symptoms. Setting the study in a single clinic at teaching hospital and drawing participants from a sample with little racial diversity and a bias towards high education may limit the transferability of knowledge generated to other types of primary care settings. While the model that this study generated could guide future efforts in training and clinical practice, this study has not tested its utility.

Implications for research and/or practice

The model suggests that focusing on the content of conflictual topics leads to clinical deadlock, while prioritizing interpersonal process may provide opportunities for positive change. In the primary care setting, attention to interpersonal process requires a mix of patient-centered communication skills, especially asking about patients' concerns, priorities and values and listening actively to their responses, responding to patients' emotions, with genuine personal engagement and emotional involvement and engaging in shared decision making. These skills are well established in primary care[42] and so the model may promote a reminder to apply familiar skills at a time of interpersonal challenge, rather than a new intervention. Continuing education to refresh these skills using methods such as observed interviews or interactions with standardized patients[43] could be useful. That both patients and physicians find these interactions frustrating indicates that testing if such educational approaches could improve care is warranted.

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In summary, our data suggest that physicians' attitudes and actions, such as those that promote feelings of validation, may help overcome troublesome topics and lead to positive interactions and constructive collaboration between patients and physicians. One potential value of this model is that it may encourage clinicians to shift their focus away from those troublesome topics (content) and towards building trusting relationships with their patients (process). This study provides experiential observations of patients and doctors in family medicine that support that value of interpersonal skills and strategies in managing very common and challenging presentations of burdensome symptoms and high health anxiety.

Additional Information

Author Contribution: TL, RM, and MM designed the study. TLL, MM, EB, RG, RM performed the analyses. TL conducted the literature search and wrote the first draft of the manuscript. All authors contributed to and have approved the final manuscript.

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Ethical approval: This study was approved by the Mount Sinai Hospital Research Ethics Board.

Conflicts of Interests: None declared.

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References

1 Ashman JJ, Rui P, Okeyode T. Characteristics of Office-based Physician Visits, 2016. *NCHS Data Brief* 2019;:1–8.

2 Jackson J, Fiddler M, Kapur N, *et al.* Number of bodily symptoms predicts outcome more accurately than health anxiety in patients attending neurology, cardiology, and gastroenterology clinics. *J Psychosom Res* 2006;**60**:357–63. doi:10.1016/j.jpsychores.2006.02.006

3 Creed FH, Davies I, Jackson J, *et al.* The epidemiology of multiple somatic symptoms. *J Psychosom Res* 2012;**72**:311–7. doi:10.1016/j.jpsychores.2012.01.009

4 Sunderland M, Newby JM, Andrews G. Health anxiety in Australia: prevalence, comorbidity, disability and service use. *Br J Psychiatry* 2013;**202**:56–61. doi:10.1192/bjp.bp.111.103960

5 Stone L. Explaining the unexplainable - crafting explanatory frameworks for medically unexplained symptoms. *Aust Fam Physician* 2011;**40**:440–4.

6 Stone L. Reframing chaos--a qualitative study of GPs managing patients with medically unexplained symptoms. *Aust Fam Physician* 2013;**42**:501–2.

7 Kirmayer LJ, Groleau D, Looper KJ, *et al.* Explaining Medically Unexplained Symptoms. *Can J Psychiatry* 2016;**49**:663–72. doi:10.1177/070674370404901003

8 Kirmayer LJ, Groleau D, Looper KJ, *et al.* Explaining medically unexplained symptoms. *Can J Psychiatry* 2004;**49**:663–72. doi:10.1177/070674370404901003

9 Barsky AJ, Orav EJ, Bates DW. Somatization increases medical utilization and costs independent of psychiatric and medical comorbidity. *Archives of General Psychiatry* 2005;**62**:903–10. doi:10.1001/archpsyc.62.8.903

10 Park J, Gilmour H. Medically unexplained physical symptoms (MUPS) among adults in Canada: Comorbidity, health care use and employment. *Health Rep* 2017;**28**:3–8.

11 Creed F. The relationship between somatic symptoms, health anxiety, and outcome in medical out-patients. *Psychiatr Clin North Am* 2011;**34**:545–64.

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doi:10.1016/j.psc.2011.05.001

12 Afari N, Ahumada SM, Wright LJ, *et al.* Psychological Trauma and Functional Somatic Syndromes. *Psychosomatic Medicine* 2014;**76**:2–11. doi:10.1097/PSY.0000000000000010

13 Creed F, Barsky A. A systematic review of the epidemiology of somatisation disorder and hypochondriasis. *J Psychosom Res* 2004;**56**:391–408. doi:10.1016/S0022-3999(03)00622-6

14 Eberhard-Gran M, Schei B, Eskild A. Somatic Symptoms and Diseases are more Common in Women Exposed to Violence. *J GEN INTERN MED* 2007;**22**:1668–73. doi:10.1007/s11606-007-0389-8

15 Paras ML, Murad MH, Chen LP, *et al.* Sexual Abuse and Lifetime Diagnosis of Somatic Disorders: A Systematic Review and Meta-analysis. *JAMA* 2009;**302**:550–61.

16 Hahn SR, Thompson KS, Wills TA, *et al.* The difficult doctor-patient relationship: somatization, personality and psychopathology. *Journal of Clinical Epidemiology* 1994;**47**:647–57. doi:10.1016/0895-4356(94)90212-7

17 Peters S, Rogers A, Salmon P, *et al.* What Do Patients Choose to Tell Their Doctors? Qualitative Analysis of Potential Barriers to Reattributing Medically Unexplained Symptoms. *J GEN INTERN MED* 2008;**24**:443–9. doi:10.1007/s11606-008-0872-x

18 Hartz AJ, Noyes R, Bentler SE, *et al.* Unexplained symptoms in primary care: perspectives of doctors and patients. *General Hospital Psychiatry* 2000;**22**:144–52.

19 Salmon P, Humphris GM, Ring A, *et al.* Primary Care Consultations About Medically Unexplained Symptoms: Patient Presentations and Doctor Responses That Influence the Probability of Somatic Intervention. *Psychosomatic Medicine* 2007;**69**:571–7. doi:10.1097/PSY.0b013e3180cabc85

20 Hahn SR. Physical Symptoms and Physician-Experienced Difficulty in the Physician–Patient Relationship. *Ann Intern Med* 2001;**134**:897–904. doi:10.7326/0003-4819-134-9_Part_2-200105011-00014

21 Salmon P, Dowrick CF, Ring A, *et al.* Voiced but unheard agendas: qualitative analysis of the psychosocial cues that patients with unexplained symptoms present to general practitioners. *The British Journal of General Practice* 2004;**54**:171–6.

22 Salmon P, Peters S, Stanley I. Patients' perceptions of medical explanations for somatisation disorders: qualitative analysis. *The British Medical Journal* 1999;**318**:372–6.

23 Lian OS, Robson C. “It´s incredible how much I´ve had to fight.” Negotiating

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medical uncertainty in clinical encounters. *Int J Qual Stud Health Well-being* 2017;**12**:1–13. doi:10.1080/17482631.2017.1392219

24 Salmon P, Peters S, Clifford R, *et al.* Why do General Practitioners Decline Training to Improve Management of Medically Unexplained Symptoms? *J GEN INTERN MED* 2007;**22**:565–71. doi:10.1007/s11606-006-0094-z

25 Chew-Graham C, May C. Chronic low back pain in general practice: the challenge of the consultation. *Family Practice* 1999;**16**:46–9.

26 Wileman L, May C, Chew-Graham CA. Medically unexplained symptoms and the problem of power in the primary care consultation: a qualitative study. *Family Practice* 2002;**19**:178–82.

27 Palinkas LA, Horwitz SM, Green CA, *et al.* Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research* 2015;:1–12. doi:10.1007/s10488-013-0528-y

28 Le TL, Geist R, Bearss E, *et al.* Childhood adversity and attachment anxiety predict adult symptom severity and health anxiety. *Child Abuse & Neglect* 2021;**120**:105216. doi:10.1016/j.chiabu.2021.105216

29 Kroenke K, Spitzer RL, Williams JBW, *et al.* The Patient Health Questionnaire Somatic, Anxiety, and Depressive Symptom Scales: a systematic review. *General Hospital Psychiatry* 2010;**32**:345–59. doi:10.1016/j.genhosppsych.2010.03.006

30 Salkovskis PM, Rimes KA, Warwick HMC, *et al.* The Health Anxiety Inventory: development and validation of scales for the measurement of health anxiety and hypochondriasis. *Psychological Medicine* 2002;**32**:843–53. doi:10.1017/S0033291702005822

31 Rode S, Salkovskis P, Dowd H, *et al.* Health anxiety levels in chronic pain clinic attenders. *J Psychosom Res* 2006;**60**:155–61. doi:10.1016/j.jpsychores.2005.07.005

32 Watling CJ, Lingard L. Grounded theory in medical education research: AMEE Guide No. 70. *Med Teach* 2012;**34**:850–61. doi:10.3109/0142159X.2012.704439

33 Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology* 2006;**3**:77–101. doi:10.1191/1478088706qp063oa

34 An PG, Rabatin JS, Manwell LB, *et al.* Burden of difficult encounters in primary care: data from the minimizing error, maximizing outcomes study. *Archives of Internal Medicine* 2009;**169**:410–4. doi:10.1001/archinternmed.2008.549

35 Doebl S, Macfarlane GJ, Hollick RJ. “No one wants to look after the fibro patient.” Understanding models, and patient perspectives, of care for fibromyalgia: reviews of current evidence. *Pain* 2020;**161**:1716–25. doi:10.1097/j.pain.0000000000001870

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36 Beck RS, Daughtridge R, Sloane PD. Physician-patient communication in the primary care office: a systematic review. *J Am Board Fam Pract* 2002;**15**:25–38.

37 Illingworth R. What does “patient-centred” mean in relation to the consultation? *Clin Teach* 2010;**7**:116–20. doi:10.1111/j.1743-498X.2010.00367.x

38 Stewart M, Brown JB, Weston WW, *et al. Patient-centered Medicine, Transforming the Clinical Method (2nd edition)*. Radcliffe Medical Press 2003.

39 Harris M, Fallot RD. *Using Trauma-Informed Theory to Design Service Systems*. Jossey-Bass/Wiley 2001.

40 Linehan M. *Skills training manual for treating borderline personality disorder*. Guildford Press 1993.

41 Porcerelli JH, Jones JR, Klamo R, *et al.* Childhood abuse in adults in primary care: Empirical findings and clinical implications. *Int J Psychiatry Med* 2017;**52**:265–76. doi:10.1177/0091217417730290

42 Levinson W, Roter DL, Mullooly JP, *et al.* Physician-patient communication. The relationship with malpractice claims among primary care physicians and surgeons. *JAMA* 1997;**277**:553–9. doi:10.1001/jama.277.7.553

43 Ravitz P, Lancee WJ, Lawson A, *et al.* Improving physician-patient communication through coaching of simulated encounters. *Acad Psychiatry* 2013;**37**:87–93. doi:10.1176/appi.ap.11070138

Figure Legends:

Figure 1. A **model of interpersonal tension and collaboration for patients with high physical symptom burden or health anxiety in primary care**. Physicians’ helpful attitudes and actions can facilitate discussion of troublesome topics and both identify and resolve crucial dilemmas. Resolution of these dilemmas leads to collaborative interactions between patients and physicians and, in turn, to positive outcomes for patients.

Data Availability Statement:

No additional data available.

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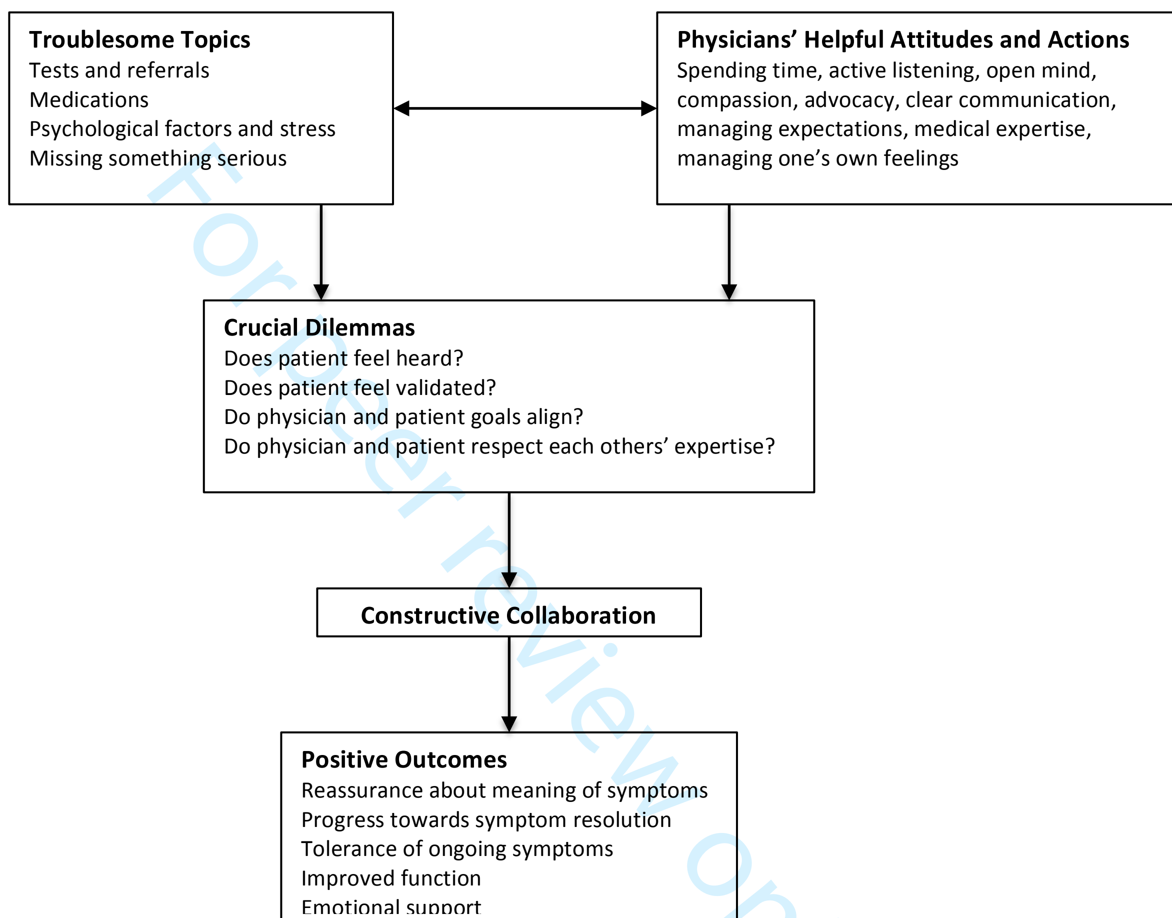
Figure 1. A model of interpersonal tension and collaboration for patients with high physical symptom burden or health anxiety in primary care.



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Standards for Reporting Qualitative Research (SRQR)*

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Page/line no(s).

Title and abstract

Title - Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	p.1, line 1
Abstract - Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions	p.2, line 3

Introduction

Problem formulation - Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement	pp. 4-5
Purpose or research question - Purpose of the study and specific objectives or questions	pp.5, line 14

Methods

Qualitative approach and research paradigm - Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/ interpretivist) is also recommended; rationale**	p.5, line 19
Researcher characteristics and reflexivity - Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability	p.6, line 4
Context - Setting/site and salient contextual factors; rationale**	p.5, line 20
Sampling strategy - How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale**	p.6, line 13
Ethical issues pertaining to human subjects - Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	p.6, line 12
Data collection methods - Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale**	p.7, line 10

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Data collection instruments and technologies - Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study	p.7, line 13
Units of study - Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	p.7, line 13
Data processing - Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/de-identification of excerpts	p.7, line 20
Data analysis - Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale**	p.7, line 20
Techniques to enhance trustworthiness - Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale**	p.8, line 5

Results/findings

Synthesis and interpretation - Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	p.8, line 16
Links to empirical data - Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings	p.9-17

Discussion

Integration with prior work, implications, transferability, and contribution(s) to the field - Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field	p.17-20
Limitations - Trustworthiness and limitations of findings	p.19, line 8

Other

Conflicts of interest - Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed	p.20
Funding - Sources of funding and other support; role of funders in data collection, interpretation, and reporting	p.20

*The authors created the SRQR by searching the literature to identify guidelines, reporting standards, and critical appraisal criteria for qualitative research; reviewing the reference lists of retrieved sources; and contacting experts to gain feedback. The SRQR aims to improve the transparency of all aspects of qualitative research by providing clear standards for reporting qualitative research.

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**The rationale should briefly discuss the justification for choosing that theory, approach, method, or technique rather than other options available, the assumptions and limitations implicit in those choices, and how those choices influence study conclusions and transferability. As appropriate, the rationale for several items might be discussed together.

Reference:

O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. **Standards for reporting qualitative research: a synthesis of recommendations.** *Academic Medicine*, Vol. 89, No. 9 / Sept 2014 DOI: 10.1097/ACM.0000000000000388

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