Should Physicians Disclose Their Own Health Challenges? Perspectives of Patients With Chronic Pain

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Abstract
This study explores how patients with chronic pain view the impact of physician self-disclosure on the patient–physician relationship. We conducted mixed-methods analyses of a cross-sectional survey eliciting experiences and attitudes regarding physician self-disclosure among 934 adults with self-reported chronic pain. Patients with chronic pain commonly recalled experiences of physician self-disclosure, most often “small talk” or physicians’ disclosure of their own chronic pain. Patients generally rated these experiences to be beneficial. Patients frequently said they would benefit from seeing a physician who has had chronic pain, or that they would want their physician to self-disclose their own chronic pain. Those who had never experienced self-disclosure were more likely to want their physician to self-disclose their own chronic pain. Nonetheless, patients held varying perspectives toward the advantages and disadvantages of physician self-disclosure, believing that self-disclosure could either positively or negatively impact the patient–physician relationship and care and communication.

Keywords
clinician–patient relationship, communication, empathy, pain management, patient/relationship centered skills, patient expectations, patient perspectives/narratives, trust

Introduction
Physician self-disclosure is defined as a physician’s sharing of personal information with the patient, ranging from casual comments to intimate private revelations (1). Although physician self-disclosure may influence the patient–physician relationship and patient outcomes, its utility as a communication tool remains controversial (2). Self-disclosure may expand typical professional boundaries, shift focus from the patient onto the physician, and lead to loss of trust in the physician; alternatively, self-disclosure may enhance patient trust in the physician and their recommendations, alleviation of loneliness, increased hope and motivation, and a feeling of being understood (3–5).

In the United States, 50 million adults suffer from chronic pain and often require multimodal and interdisciplinary approaches to treatment, yet relationships between these patients and their physicians are often challenging (6,7). Patients and physicians frequently disagree about the diagnosis or salience of a patient’s pain or the best approach to treatment, compromising therapeutic alliance and contributing to poor patient outcomes (8,9). On the other hand, a strong patient–physician relationship may improve outcomes among patients with chronic pain, including better physical and mental functioning and lower pain intensity and functional impairment (10–14). This suggests that enhancing the patient–physician relationship is an important way to optimize clinical care and outcomes for patients with chronic pain.

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Few studies have empirically described the impact of self-disclosure on the patient–physician relationship from the perspective of either the physician (2,15,16) or patient (17,18). Even less is known about the influence of physician self-disclosure on patients with chronic pain, despite the challenges that physicians face in caring for this vulnerable population.

Therefore, it is important to elucidate how communication tools like self-disclosure influence the relationships between patients with chronic pain and their physicians, potentially contributing to variations in outcomes. This study aims to address this gap by investigating the phenomenon of physician self-disclosure from the patient perspective. Given the exploratory nature of this study, we did not seek to generate or test a priori hypotheses. Rather, we were guided by the open-ended research questions: (1) How have patients with chronic pain experienced physician self-disclosure in the past? and (2) What are their current attitudes toward physician self-disclosure?

**Methods**

**Patient Recruitment**

In collaboration with the Core for Clinical Research Data Acquisition at Johns Hopkins, we developed a query that extracted data from the institution’s electronic health record (Epic) using pre-specified parameters to identify candidates for study participation. The query identified all patients who met these eligibility criteria: (1) had a medical encounter between January 2013 and July 2020 (technical constraints at the level of the electronic health system permitted extraction of data beginning only in 2013; since the query only permitted retrospective data extraction, the end date was the time the query was implemented), (2) received care in any of 12 specialty pain clinics or departments affiliated with Johns Hopkins Medicine, and/or with any of 10 Johns Hopkins pain specialists not associated with a specific pain clinic or department who regularly treated patients with chronic pain (these parameters were selected in consultation with Johns Hopkins pain specialists based on their understanding of the breadth of the institution’s pain treatment practices and the specialists’ scopes of practice), (3) were ≥18 years of age at the time of encounter, (4) possessed an active electronic health record patient-facing account (MyChart) (required for patients to receive research recruitment messages), and (5) opted to receive research recruitment messages via the electronic health record. A recruitment message containing a weblink to participate in an anonymous online survey as part of the study was sent in batches directly to all patients identified by the electronic health record-based query between August and September 2020. The introduction page in the survey informed patients that initiating the survey constituted their consent to participate in the study. Nonresponse bias was evaluated using one- and two-sample t-tests by comparing patient characteristics between survey respondents and all survey recipients since lack of patient identifiers precluded the determination of nonrespondents.

**Survey Implementation**

We developed a survey consisting of closed- and open-ended items aiming to explore patients’ prior experiences of and current attitudes toward physician self-disclosure (online Supplemental material). Content validity was established among members of our team with expertise in chronic pain (GJT, MAE) and in consultation with an internist (MCB) who has published extensively on patient–physician communication. Due to the absence of validated survey instruments on physician self-disclosure, we were guided in developing our survey questions by the extant literature on the types of self-disclosure observed in clinical settings (1,19), perspectives on self-disclosure from patients (17,18) and physicians (2,15,16), and analyses of its utility (3,20). Study team members pre-tested the survey on the online Qualtrics platform and made revisions to optimize the user experience. The final survey was launched on August 4, 2020 and closed on October 2, 2020. Multiple survey submissions from the same IP address were disabled. Partially completed surveys were automatically recorded 2 weeks after their last active status.

We applied basic descriptive statistics to closed-ended survey items and used parametric and nonparametric tests as appropriate for comparisons, with $P<.05$ indicating statistical significance. We used single sample t-tests to compare the characteristics of respondents to all survey recipients. Data were analyzed using Stata (Stata Corp. 2013. Stata Statistical Software: Release 13. College Station, TX: StataCorp LP).

**QualitativeAnalyses**

Text responses to open-ended survey items were analyzed using a thematic analysis approach driven by grounded theory, involving the iterative process of coding the text and identifying themes and patterns arising from codes (21,22). Two researchers independently performed open coding in an inductive fashion. After coding a batch of the text, 3 researchers met to discuss codes and resolve discrepancies until a reaching consensus, at which point an initial codebook was established. Both researchers independently used the codebook to code another batch of text, developing new codes as needed. The 3 researchers then met to resolve coding discrepancies and incorporate new codes into a refined codebook, which was subsequently used to code another batch of text. This process was repeated until the entire dataset was coded and a final codebook was created, which included organized themes and subthemes. Researchers coded using the qualitative program NVivo (QSR International Pty Ltd, Version 12.0). COREQ guidelines were followed in reporting qualitative methods and results (23).

**Results**

**Survey Participation**

We sent survey invitations to 11,258 patients and received 1,084 responses. We omitted 150 responses that were deemed ineligible (34 duplicates, 23 with zero substantive items
answered, 93 without chronic pain). Analyses utilized a final sample of 934 patients with chronic pain who completed ≥1 substantive survey question (8.3% response rate). Ninety-five percent (890 of 934) of respondents completed the entire survey. Table 1 presents the demographic characteristics of survey respondents. Compared to all recipients, those who responded to the survey were, on average, older (56.1 vs 54.8 years, \( P = .0097 \)) and more likely to self-identify as female (68% vs 64%, \( P < .001 \)) and White (74% vs 64%, \( P < .001 \)).

**Prior Experiences of Physician Self-Disclosure**

Thirty-five percent (325 of 918) of respondents reported prior experience of physician self-disclosure (Table 2). The types of self-disclosure experienced, and respondents’ ratings of how these experiences affected them on a scale from 0 (greatly harmed) to 10 (greatly benefited) (mean [standard deviation]), includes casual “small-talk” (7.3 [1.9]), the physician’s own chronic pain (8.0 [2.1]), health challenges other than chronic pain (7.5 [2.6]), personal hardship involving family/friends (8.0 [2.2]), personal hardship not related to health (7.2 [3.0]), and something else (no rating elicited).

Compared to those reporting no prior self-disclosure experience, those reporting prior self-disclosure experience were, on average, younger (53.9 vs 58.1 years, \( P < .001 \)) and more likely to self-identify as White compared to Black (37% vs 22%, \( P < .001 \)). Additionally, those without prior self-disclosure experience were more likely to indicate that they did not want their physicians to self-disclose their own chronic pain (9%) compared to respondents with prior self-disclosure experience (4%) (\( P < .001 \)). Conversely, those with prior self-disclosure experience were more likely to indicate that they were unsure or that it depends on whether they wanted their physicians to self-disclose their own chronic pain or not compared to respondents without prior self-disclosure experience (38% vs 28%) (\( P < .001 \)).

**Current Attitudes Toward Physician Self-Disclosure**

Forty-one percent (379 of 934) of respondents said they would benefit most from seeing a physician who has had chronic pain themselves. Sixty percent (556 of 924) of respondents said they would want their physician to self-disclose their own chronic pain. Thirty-nine percent (190 of 490) of respondents without prior self-disclosure experience said they would want to experience self-disclosure (Table 2).

Respondents without prior self-disclosure experience were more likely to indicate that they wanted their physicians to self-disclose their own chronic pain (63%) compared to respondents with prior self-disclosure experience (58%) (\( P < .001 \)). Additionally, those without prior self-disclosure experience were more likely to indicate that they did not want their physicians to self-disclose their own chronic pain (9%) compared to respondents with prior self-disclosure experience (4%) (\( P < .001 \)). Conversely, those with prior self-disclosure experience were more likely to indicate that they were unsure or that it depends on whether they wanted their physicians to self-disclose their own chronic pain or not compared to respondents without prior self-disclosure experience (38% vs 28%) (\( P < .001 \)).

**Table 2. Respondents’ Experiences of Physician Self-Disclosure and Current Attitudes.**

| Characteristic | Mean (SD), range |
|----------------|------------------|
| Age (n = 894)  | 56.1 years (15.0), 20–98 |
| Gender (n = 894) | Female 268 (30%), Male 611 (68%), Other 15 (2%) |
| Race (n = 890) | White 662 (74%), Black or African American 191 (22%), American Indian or Alaska Native 20 (2%), Asian 24 (3%), Native Hawaiian or Pacific Islander 3 (0.3%), Other 35 (4%) |
| Physicians seen for pain (n = 890) | Primary care 670 (75%), Pain specialist 818 (92%), Psychiatrist 240 (27%), Other 292 (33%) |
| Pain duration (n = 894) | 0–10 years 483 (54%), >10 years 411 (46%) |

\( ^a \)Patients’ self-rating on a scale from 0 to 10, with 0 = no pain at all and 10 = worst possible pain.

\( ^b \)Percentages do not sum to 100.

\( ^c \)Includes only patients who endorsed a prior experience of self-disclosure.

\( ^d \)Percentages do not sum to 100.

\( ^e \)Includes only patients who endorsed no prior experience of self-disclosure.
Thematic Analysis

Three major themes captured respondents’ answers to open-ended survey items: (1) Patients’ prior negative experiences, (2) Perceived impact on patient–physician relationship, and (3) Perceived impact on care and communication (Table 4).

“Patients’ prior negative experiences” includes respondents’ experiences of feeling misunderstood or having their pain not taken seriously by physicians. Respondents described being treated as “drug-seekers” and not receiving medical care that addressed their needs. Some also perceived their physicians to be dismissive and uncaring.

“Perceived impact on patient-physician relationship” reflects the form of the patient–physician relationship, while “Perceived impact on care and communication” captures the function of patient–physician encounters. Under either theme, subthemes delineate the positive, negative, and variable impact that respondents believed self-disclosure—particularly of the physician’s personal experience with chronic pain—could have on these relational dynamics.

Whether through perceptions or actual experiences, respondents described the ways they felt self-disclosure could affect the patient–physician relationship and the factors that determined its effects. Respondents believed that self-disclosure could promote empathy and understanding, build rapport, and enhance trust, or, conversely, violate professional boundaries. These outcomes depended on the comfort level of both the patient and physician within their existing relationship. Respondents emphasized that what mattered most to them was knowing that their physicians could truly empathize and understand their experience; they reiterated that this does not require self-disclosure, and that physicians should only self-disclose if it achieves or improves upon this chief aim.

Similarly, respondents expressed how self-disclosure could improve the quality of their care and the effectiveness of their communication with their physicians. However, respondents were concerned that irrelevant self-disclosures could divert time and attention away from them and onto the physician. Tactless self-disclosures could be unhelpful at best and risked invalidating their unique pain experiences and hence compromising the individualized care that they needed. Respondents preferred their physicians self-disclose only if it was clearly relevant to their condition and management (ie, if they had the same pain condition, or could offer personal experience of treatment), and if it was delivered appropriately (ie, avoid “over-sharing,” or share inasmuch as it benefits them). Finally, respondents emphasized that what mattered most to them was having a medically knowledgeable and competent physician; self-disclosure was unnecessary, and should only be done if it achieves or improves upon this chief aim.

Discussion

The results of this study conducted in a large sample of patients with chronic pain provide insights into the experiences and attitudes around physician self-disclosure in this population. Results from comparative and thematic analyses of survey responses suggest that patients with chronic pain perceive the benefits, risks, and utility of self-disclosure in diverse ways. While respondents consistently emphasized their desire to be understood by their physician and receive patient-centered care—which they believed could be enhanced by their physician’s personal illness experiences—they also acknowledged the risks self-disclosure posed to the physician’s clinical objectivity and professionalism. Therefore, patient preferences, relevance to the patient, and content and delivery determine the impact of self-disclosure.

Despite these varied attitudes, respondents generally had a favorable view of self-disclosure. They rated their self-disclosure experiences highly regardless of the content, and a substantial percentage expressed that they would prefer to see a physician who has had chronic pain themselves and would like their physician to self-disclose personal
experiences of chronic pain. These attitudes corroborate findings of the 2 studies that directly elicited patient attitudes toward physician self-disclosure and found that their impressions were favorable (17, 18). A common sentiment expressed by our respondents and patients in these 2 studies is that shared illness experience increases rapport between patient and physician. In many cases, our respondents said they only wanted their physician to self-disclose if they had the same pain condition. If so, respondents believed they would have a deeper connection with their physician, who they felt could truly understand the impact of chronic pain on their lives.

Nonetheless, some of our respondents opposed self-disclosure, and more expressed uncertainty or ambivalence toward it. Respondents commonly expressed concerns about self-disclosure that have been observed in audio recordings of real-life encounters between patients and their primary care physicians (20). These included receiving unsolicited and impertinent self-disclosures and transfer of focus from the patient onto the physician, rendering self-disclosures unhelpful and sometimes disruptive.

Interestingly, our respondents’ perspectives parallel what other qualitative studies have revealed about physicians’ opinions of disclosing their illnesses to patients. The desire among patients to have their experience taken seriously by their physicians was an important subtheme that emerged from our study, and physicians who have been patients

### Table 4. Representative Comments to Open-Ended Survey Items, by Themea.

| Theme | Comment |
|-------|---------|
| **Prior negative experiences** | “My experience with… pain doctors has been bad. I am in and out with no connection.” [407]b “One [doctor] stated that I needed to get over it, it’s all in my head.” [752]c “Not all patients are drug seekers… we feel isolated when we are desperate for help and feel as if doctors do not understand our perspective.” [142]d |
| **Perceived impact on patient-physician relationship** | **Positive** “It’s comforting to know when the person treating me has had the same experience and can relate. I feel they’ll be more understanding.” (Patient feels understood) [624] “I believe it provides more of a patient/doctor relationship. Gives me a sense that they actually care about my condition.” (Builds rapport) [423] “I would trust their opinion more, because they lived with pain.” (Enhances patient trust) [700] |
| **Negative** | “It encroaches the line of professional versus personal which is a line that should be firm and not encroached on. Plus it just makes me uncomfortable.” (Violates professional boundaries) [784] |
| **Variable** | “I think I would need to be in a trusting relationship with the doctor before he or she start sharing personal information.” (Depends on existing patient-physician relationship) [377] “We need to consider the privacy of the doctor’s health issues also. The doctor would need to agree to telling me his or her medical problems.” (Depends on doctor’s comfort and prerogative) [706] “It doesn’t matter if they share their personal information, as long as they understand how I am feeling and believe what I am expressing to them.” (Empathy is the chief aim) [40] |
| **Perceived impact on care and communication** | **Positive** “Since they are living in pain… they may have suggestions and more resources as to a real plan on how best to treat the pain… If I had this option I would request the first appointment.” (Improved care) [453] “It is hard enough to share with a provider chronic pain issues. Many times I don’t even bother to bring up how I am suffering because I don’t want to be seen as complaining or trying to get meds for the pain. Having doctors share their experience makes for a better environment to encourage having these conversations.” (Improved communication) [38] |
| **Negative** | “Appointments aren’t long and I don’t want to lose lots of time that I need focused on my own care.” (Takes time and focus away from patient) [873] “I don’t see where that would benefit me.” (Irrelevant, unimportant, unhelpful, or has questionable value) [481] “Provider experiences can prejudice their objectivity. I would be looking for signs that they were superimposing their personal experiences onto me.” (Dismisses patient individuality) [663] |
| **Variable** | “There is no reason for me to know about the doctor’s pain unless it was the same as mine and could help me make decisions.” (Depends on relevance to patient) [263] “Would depend very much on context and the way the disclosure is made to me whether telling me they have also had chronic pain would be helpful.” (Depends on context and nature of delivery) [147] “I go to see a physician because of that person’s medical experience. If they want to share their personal experience because they think it will help their treatment of me, that’s fine.” (Effective clinical care is the chief aim) [804] |

aSubthemes captured by representative comments are included in parentheses. Individual respondents are denoted by numerical identifiers in brackets.

bExample of perceived poor patient-physician relationship.

cExample of perceived poor care and communication.

dExample of poor patient-physician relationship and care and communication.
themselves recount how their illnesses increase their empathy for their patients and make them better at identifying and addressing their patients’ medical and emotional needs (24–29). Our respondents reinforced the notion that physician self-illness can positively impact care and communication, as the second most common response was that physicians who had chronic pain could offer distinct insights into treatment and management and thus be better clinicians. On the other hand, our respondents also expressed concern that physicians might impose their own experiences on patients in a way that discredited their individualized experiences and treatment needs, again paralleling the concerns of physicians in some studies (27,29). Reiterating that “not all pain is the same,” respondents opposed physicians who inaccurately equated their experience with the respondents or assumed they knew what was best for them. Both parties appear to agree that physician self-disclosure should only happen if it bolsters empathy or facilitates better treatment.

An intriguing finding in our study was an apparent paradox: while respondents rated their self-disclosure experiences highly, those who had experienced self-disclosure were less certain about either wanting or not wanting their physician to self-disclose chronic pain versus those who never experienced self-disclosure. We speculate that patients with prior experience of self-disclosure better understand the nuances of how it can improve or damage their relationship and care; having encountered firsthand how and what their physicians shared about themselves, such patients may be more realistic in qualifying their preferences because they know how self-disclosure could go well or poorly. On the other hand, those who have never had such an experience may possess a more idealized version of what self-disclosure is, and therefore be more prone to imagining it as either good or bad. Importantly, physician characteristics—including the nuance and aptitude with which they self-disclosed—were not assessed in our survey and may further drive the difference in these responses.

Our study has several strengths. We offer one of the only patient-centered perspectives on physician self-disclosure, and, to our knowledge, the only study to spotlight the experiences and attitudes of patients with chronic pain. Our study represents patients drawn from multiple clinical settings, whereas the extant literature on self-disclosure focuses on patients in primary care. Our study geographically diversifies the literature on self-disclosure—presently dominated by study samples in Europe and New Zealand—by incorporating patients from an urban American city.

In our study, 60% of survey respondents said they wanted their physician to self-disclose their own chronic pain; who might these patients be? Our study suggests that these are more likely to be patients who have not experienced self-disclosure before. Further qualitative research in the form of focus groups or patient surveys can shed light on why these patients may have different views of self-disclosure than patients who have experienced some form of self-disclosure already. Further quantitative research is also needed to explore patient variables that might dictate those who are more likely to benefit from self-disclosure. For example, self-disclosing to a patient who had a negative experience of it recently might serve to do more harm than good.

Limitations

First, despite a large sample size, the 8.3% survey response rate in our study is lower than desired. Nonetheless, the response rate surpasses the average response rate (3.8%) of the electronic health record recruitment method at our institution. Second, our sample is based on a single institution and limited by nonresponse bias and may thus lack external validity. Nonetheless, our findings corroborate the effects of self-disclosure described in other studies for both patient and physician populations. Third, we utilize a broad definition of self-disclosure that incorporates content ranging from small-talk to intimate disclosures of personal illness, which may be perceived differently and bias responses to items about general self-disclosure preference. However, respondents’ answers to open-ended items revealed how they viewed different types of self-disclosures and suggested that the most meaningful content to them involved the physician’s personal experience with chronic pain that matched their own. Fourth, our study did not distinguish between different types of chronic pain, treatments undertaken by study participants, and the settings in which they received care; these variables may influence patients’ views about physician self-disclosure and may be worth probing in future studies. Finally, electronic survey distribution may have limited response rates among individuals with lower socioeconomic status, health literacy, or limited English proficiency, variables that were not captured in this study.

Conclusion

Our study provides evidence that appropriate use of physician self-disclosure may improve patient–physician relationships and care and communication for patients with chronic pain. Many patients report favorable experiences of self-disclosure and believe that it fosters greater understanding and empathy. Others caution that self-disclosure may diminish patients’ own unique needs and experiences. Physicians caring for patients with chronic pain should consider the risks and benefits of self-disclosure individualized to each patient, being aware that patients’ prior experiences of self-disclosure may influence their perception of its present utility and desirability.

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Ethical Approval
This study was approved by the Johns Hopkins Medicine Institutional Review Board.

Statement of Human and Animal Rights
All procedures in this study were conducted in accordance with the Johns Hopkins Medicine Institutional Review Board.

Statement of Informed Consent
This study was designated as exempt research by the Johns Hopkins Medicine Institutional Review Board, and informed consent is not applicable.

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