

Clinical Pain Research

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“Opioids are opioids” – A phenomenographic analyses of physicians’ understanding of what makes the initial prescription of opioids become long-term opioid therapy

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Abstract

Objectives: To explore prescribers’ understanding of what makes initial prescription of opioids become long-term opioid therapy (opioids >90 days).

Methods: A qualitative research design, phenomenography, was used for this study. Fifteen attending physicians working within primary, secondary and tertiary care in Sweden in the fields of general practice, rehab medicine, orthopedic surgery, neurosurgery, or obstetrics and gynecology were purposively recruited consecutively until categorical saturation was reached. Semi-structured interviews were used for data collection. The transcripts were analyzed and categorized by two researchers. A third researcher checked for consistency between the data and the categories. An outcome space was constructed representing the logical relationship between the categories.

Results: The analysis identified six categories: *The addictive opioid*, *The deserving patient*, *The ignorant prescriber*, *The lost patient*, *The compassionate prescriber*, and *The exposed prescriber*. The differences in conceptions among the categories were clarified through three main

contributors related to opioid therapy: prescriber’s characteristics, patient’s characteristics, and the healthcare organization.

Conclusions: Opioids were understood as being addictive with long-term use promoting a downward spiral of tolerance and withdrawal driving the pain, leading to continued prescription. Long-term opioid therapy could be justified for patients who improved in function, and who were perceived as trustworthy. Inadequate follow-up of patients, poor training in pain management and addiction medicine, personal attitudes and beliefs about opioids, a perceived professional obligation to treat patients with pain, and lack of collegial support, were factors understood to promote clinically unindicated long-term opioid therapy.

Keywords: drug prescription; opioids; pain management; physicians; qualitative research.

Introduction

Safe and effective pain-treatment is essential when caring for people suffering from musculoskeletal injury or recovering from surgery. In the U.S. and Canada, the excessive use and reliance on opioids for alleviating pain has been a contributor to an opioid crisis, leading to opioid use disorder (OUD), overdoses, and opioid related deaths. This has highlighted the importance of safe and science-supported opioid prescribing and management practices [1, 2]. Even though the benefits of extended opioid therapy are questionable and associated with several health risks [3–8], long-term opioid therapy, i.e., opioids >90 days, is a clinical reality. A continued practice of prescribing opioids, i.e., more than one refill of the initial opioid prescription within the first month of treatment, type of opioid, and opioid doses has been associated with long-term opioid therapy and problematic opioid use [9, 10].

To decrease the risks associated with long-term opioid therapy, several guidelines have been developed, focusing

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on risk mitigation and a decrease in practices prescribing opioids for chronic pain [11, 12]. Lately, these guidelines have been criticized for lacking succinct and specific guidance on how to make clinical decisions in line with the recommendations [13, 14]. Furthermore, opioid prescribing practices vary among individual physicians [15], medical sub-specialties, level of care, and geographical location [16, 17]. Research exploring factors associated with physicians' opioid prescribing practices suggest that the patient's reported pain intensity or pain-related behaviors influence prescription patterns [15, 18].

Previous qualitative studies have explored the decision-making in prescribing opioid therapy for chronic pain over time. One American and one British study, each explored factors that influence primary care clinicians in prescribing opioids, found that the balance between treating the patient's symptoms and causing potential harm is experienced as a challenge, and the potential harm of opioid therapy is not taken lightly [19, 20]. Similar results were found in an evidence synthesis of 17 studies on opioid therapy from the prescribers' perspectives [21]. In another meta-synthesis of 21 studies, Kennedy et al. [22] concluded that the inherent complexity of opioid prescribing practices and the limitations of healthcare systems need to be recognized for development of strategies for prescribing opioids. A majority of these studies were conducted in primary care settings and foremost in North America and Great Britain [19, 23–31]. The differences in the healthcare systems between different countries, especially North America and Europe, e.g., availability of non-pharmacological treatments, patients' expectations of getting drug prescriptions, and financial compensation systems, could explain that prescribing behavior seems to vary by country [32]. This highlights the need to explore the prescribing patterns in different cultural settings and contexts.

Since early opioid prescribing patterns have been associated with long-term use [9], the current study explored the transition from an initial prescription of opioids to long-term opioid therapy from a prescriber's perspective. To our knowledge, the differences in understandings of what makes the initial prescription become long-term opioid therapy have not been examined. Here, we included several medical specialties from different levels of care to enable a variation in the qualitatively different ways in which physicians understand the phenomenon, within a Swedish healthcare context.

Methods

To explore the differences in understandings of what makes the initial prescription of opioids become long-term opioid therapy, a qualitative research design, phenomenography, was used [33].

Phenomenography can add to the body of knowledge on how and what we experience, understand, and communicate within the framework of healthcare [34, 35]. In phenomenography, the researcher is primarily interested in how phenomena are conceived and understood [33] and how to capture the differences and similarities in experiences of the world [36]. Phenomenography should not be confused with phenomenology. Even though both approaches aim to explore human experience, phenomenography is less interested in individual lived experience or the essence of the phenomenon, than it is in the variation of experience and the collective meaning of a phenomenon [34]. In this study, conceptions of what drives a continued practice of prescribing opioids were of interest. A *conception* is viewed as a basic category of description accessed through language [33]. These conceptions are then categorized. The categories should be based upon the individuals' conceptions, but are not equal to them, rather a pool of meanings derived from all the participants' understandings of the phenomenon [35].

Procedures and participants

Attending physicians with experience of prescribing opioids were eligible for participation. Since we aimed for variation in experiences of opioid prescribing practices, participants were purposively recruited from different medical disciplines, healthcare settings, and from diverse regions in Sweden. We recruited clinicians who worked in various outpatient and inpatient settings based on their different experiences of prescribing opioids. For example, primary care clinicians and pain specialist often meet patients already on opioids, while clinicians in the emergency department and surgical specialties more often initiate opioid prescription. The different medical specialties and practice types that were enrolled are described in Table 1.

To find suitable participants both gate-keepers, e.g. professionals who could recommend clinics and colleagues to contact, and official information such as lists of clinics and employed, were used. If participants were recruited through their working place, the head of the clinics had approved recruitment among their staff.

Table 1: Participant characteristics (N 15).

Demographic variables	Mean (range)	n, %
Age, years	50,5 [37–72]	
Years in practice	22 [11–42]	
Sex		
Male		7 [47]
Female		8 [53]
Medical specialty^a		
General practice		6 [40]
Anesthesiology		1 [7]
Rehab medicine		3 [20]
Orthopedic surgery		4 [27]
Neurosurgery		1 [7]
Obstetrics and gynecology		1 [7]
Subspecialized in pain		3 [20]
Practice type		
Primary care		4 [27]
Private practice, specialized care		2 [13]
University hospital, specialized care		8 [53]
Hospital, specialized care		1 [7]

^aOne person can have more than one medical specialty.

The intention was to include 10–20 participants. Thirty-two attending physicians were approached via e-mail, 14 from primary care and 18 from specialized care. They received written information about the study and a request for participation. Thirteen individuals did not respond to the invitation, and three individuals declined participation: two due to their workload and one because of sick-leave. Finally, fifteen participants were recruited. The recruitment stopped when new participants did not provide data with additional meaning than previous data on the phenomenon under study, and categorical saturation was considered to be reached [37].

Data collection

The 15 physicians who agreed to participate were scheduled for one interview, and data collection was conducted between January and May 2020. The participants chose the time and location for the interview. All but one interview, which was held at the participant's home, were conducted by phone and all were digitally recorded. Participants were interviewed by HL who is a clinical social worker with experience in opioid agonist therapy and addiction medicine. She is trained in qualitative methods and experienced in doing research interviews. Immediately prior to the interview, the participants were given an opportunity to ask questions about the study; thereafter, oral consent was obtained and recorded. The interviewer had no prior relationship to the participants.

The interviews were semi-structured. The interview guide used open-ended questions and was developed with guidance from the literature regarding qualitative methods [38]. Important topics were established by going through current literature on research regarding opioid prescribing practices and long-term opioid therapy for pain. Before the data collection, the interview guide was piloted twice, interviewing one pain specialist working in specialized pain care, and one general practitioner working in primary care. The pilot interviews resulted in minor revisions to enable a focus on the specific phenomenon without compromising the variation in understandings. The interview guide was used in an explorative way to promote openness and allow the participants to discuss questions most pertinent to them, including their experiences of prescribing opioids. A sample of

the interview guide is described in Figure 1. The interview continued until reaching a state of mutual understanding, and the discussion was exhausted regarding each topic [39]. The interviewer was free to probe further on subjects generated during the interviews that were consistent with the aim of the study. The interviewer used repetition, request for clarification or elaboration, and confirmation as probing strategies to avoid ambiguity and enable an interpersonal and flexible interview, being sensitive to each interviewee [38]. The interviews lasted between 15 and 66 min. All interviews were transcribed verbatim, by the interviewer, i.e., the first author.

Data analyses

When analyzing the data, the researchers reflected on preconceptions to enable an explorative approach, with emphasis on the participants' understandings [33, 34]. The transcripts were categorized using OpenCode, which is a tool for coding qualitative data generated from text, such as interviews, observations, or field notes [43]. The interviews were transcribed continuously by the first author; hence, the analysis was commenced during data collection. Then, when data collection was completed, data were analyzed in the context of all transcripts. HL and the second author CÖ, analyzed the transcripts consistent with the constant comparative process and the seven analysis steps outlined by Dahlgren et al. [40], described in Figure 2. CÖ is a researcher, experienced in the qualitative method as well as a specialist nurse with long clinical experience from psychiatric care. The transcripts were read and categorized separately by HL and CÖ, and the categories were compared and redefined until a negotiated consensus was reached [35]. Thereafter, LK read five transcripts to check for consistency between the data and the categories. LK is a consultant in pain medicine, working at an addiction clinic with patients having chronic pain and iatrogenic OUD, and is a researcher within the field of pain and opioid therapy. The last author PÅ assessed the audit trail, methodological rigor, consistency between categories and quotes, and levels of interpretations. PÅ is a physiotherapist and a Professor in Physiotherapy, who is experienced in the qualitative method and has clinical expertise in behavioral medicine treatment for persons with chronic pain. Finally, all authors

1. What do you think of opioids as a pain treatment? In case of long-term pain?
2. When do you think it is appropriate to prescribe opioids as part of pain management?
 - How do you assess whether it is appropriate?
 - How does gender, age, and social situation matter?
 - Can you give examples of when it has been appropriate or inappropriate?
3. If you decide to continue to prescribe opioids, how do you choose preparations and dosage?
4. What do you do if you don't think the treatment is working?
5. What is your responsibility when you prescribe opioids?
6. How do you experience that the attitude towards opioids have changed over time?
7. What do you think is the most common reason for initial opioid prescription to become to long-term treatment?

Figure 1: Interview guide.

1. Familiarization: Reading through the interview transcripts several times. In the initial phase, all data in the entire pool are given equal consideration.
2. Condensation: Identifying meaning units in the transcripts and marking these for further scrutiny.
3. Comparison: Comparing the units with regard to similarities and differences.
4. Grouping: Allocating answers expressing similar ways of understanding the phenomenon to the same category.
5. Articulating: Capturing the essential meaning of a certain category.
6. Labelling: Expressing the core meaning of the category.
7. Contrasting: Comparing the categories through a contrastive procedure whereby the categories are described in terms of divergence and convergence.

Steps 3–6 are repeated in an iterative procedure to make sure that the similarities within and differences between categories are distinctly distinguished and described.

Figure 2: The constant comparative process used in phenomenography described in seven analysis steps.

negotiated the construction of an outcome space, discussing different models to find a logic structure that represents the relationship between the descriptive categories. The outcome space that was agreed upon, illustrated the hierarchical structure of how the categories relate to each other [34, 41].

Methodological rigor

Procedures were used to enhance the standards of rigor, trustworthiness, credibility, and transferability in this study in accordance with the consolidated criteria for reporting qualitative research (COREQ) guidelines, however, participants did not report feedback on the findings [42]. This included keeping a research diary to enable a structured and systematic record of the analyses and interpretative

process, and engaging in reflexivity (e.g., questioning interpretations, becoming aware of one's own expectations on the data) throughout the research process. During data collection, the interviewer established credibility of the findings by summarizing and clarifying ambiguous or indistinct statements during the interviews, and a semi-structured interview guide was used to ensure that all of the same topics were discussed with all participants. Credibility was established by reviewing each transcript, looking for similarities and differences within and across study participants' interviews, following the phenomenographic analysis process [35, 40], and using a multi-analyst, interdisciplinary investigator triangulation enabling different perspectives on the data [43]. To enhance transferability of findings, the research question and the context are described in detail in order to the reader to judge if the findings should be expected to be transferable to other relevant contexts [44].

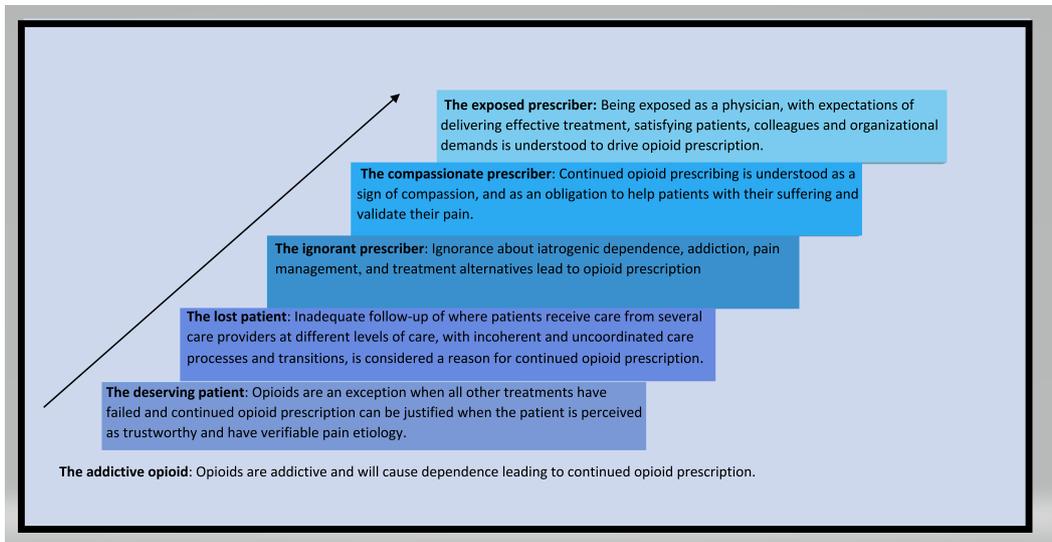


Figure 3: The outcome space illustrates the logical relationships between the categories. The categories are depicted as a hierarchy of six levels of understanding, ranging from the most rudimentary or basic level to the most complex level of understanding of how the interaction of patient's and prescriber's characteristics, together with the healthcare organization contribute to continued opioid prescription. The understanding and experience of opioids as addictive is the first level and the premise, the framework of understanding, and the other categories are defined as related, but qualitatively different parts of what makes initial prescription of opioids become long-term opioid therapy.

Findings

The analysis identified six categories: *The addictive opioid*, *The deserving patient*, *The ignorant prescriber*, *The lost patient*, *The compassionate prescriber*, and *The exposed prescriber*. The assigned metaphors illustrate six different ways of understanding what drives opioid prescribing practices from a prescriber's perspective; however, they should not be understood as a typology of prescribers, i.e., the categories cannot be attributed to any one participant, and each participant held more than one understanding.

The outcome space (Figure 3) illustrates the hierarchical structure of how the categories relate to each other defined by the complexity of three identified contributors: prescriber's characteristics, patient's characteristics, and the healthcare organization, described in Table 2. The categories range from the most rudimentary or basic level, i.e., the understanding and experience of opioids as addictive, which is the premise and framework for all the other categories, to the most complex level of understanding of how the interaction of patient's and prescriber's characteristics, together with the healthcare organization, contribute to continued opioid prescribing practices. The categories are further described and illustrated by quotations from the numbered interviews as follows.

The addictive opioid: This category emphasized the understanding that opioids are by nature addictive, as well as the need for caution in prescribing them. All of the participants were quite skeptical about long-term opioid therapy, due to the lack of evidence for efficacy and associated risks.

P11: I think opioids are opioids. Regardless of when you use them, you will create a dependence. [–] And then, no matter how good you are as a patient or conscious you are, or informed,

or, uh, have a lot of knowledge, your doses will increase ... And you'll get all sorts of side effects and, uh, so, it ends only in one way.

Therefore, opioids are not considered a suitable choice for long-term treatment, especially not for younger patients or patients with known risk factors for developing OUD, e.g., mental health problems, or a history of substance use disorders.

P5: [Then] you have to see, is there any addiction problem with the patient? It's something you have to decide on, you have to consider the age of the patient, I think, uhm ... [...] uhm, yes, that means, if it's a young person, I'm more reluctant to put them on opioids.

Opioid therapy is thought to impede motivation to try alternative therapies.

P4: Some patient cases, such as that, uhm, it's like the pills, that you become, it's the pills you rely on, it's the pain relief you rely on. You don't try to fix it with other things, such as with yourself or with exercise, or with diet or [...] it becomes a passive treatment, like, in some way. So, I think that is problematic.

Educating and informing the patients about pain and opioids are described as a way to prevent long-term opioid use. It is believed that the prescriber has a responsibility to inform patients about tolerance and withdrawal symptoms such as increased pain and anxiety, and thereby explain why long-term opioid therapy is not a suitable treatment for chronic pain.

P11: I think like this. When I prescribe, if I am a doctor now and not a pain specialist, then I have a responsibility when I initiate an opioid treatment, that I first and foremost inform

Table 2: Description of how the differences in conceptions among the categories were clarified through three main contributors related to opioid therapy; prescriber characteristics, patient characteristics, and the healthcare organization.

Categories Contributors	The addictive opioid	The deserving patient	The lost patient	The ignorant prescriber	The compassionate prescriber	The exposed prescriber
Healthcare organization		Opioids are an exception when there are no other effective treatments to offer	Incoherent and uncoordinated care processes and transitions	Lack of implemented local guidelines and supplementary training in pain and addiction	Lack of treatment alternatives.	Lack of resources, lack of time, and lack of collegial support
Prescriber characteristics		Controlling and paternalistic	Consultants with a short-term perspective, a pragmatic approach	Ignorant about pain, opioids, or alternative treatments	Committed, compassionate and concerned	Afraid, stressed, resigned, avoidant, alone and exposed
Patient characteristics		No risk factors for opioid use disorder, adhere to treatment, trustworthy, clear pain etiology	Abandoned, neglected and lost	Pain severity, complex pain conditions	Distressed and suffering	Demanding or threatening

the patient, well inform the patient about what the drug is for, what the risks are, that there is a need for it now but that it is something that will need to be tapered off and that you have a plan for it, I think that is my responsibility.

It was emphasized that even though opioids are seen as addictive, it is important to know when to use opioids, and that opioids *should* be used when clinically indicated. This could entail use for acute and post-operative pain and cancer pain.

P13: With that being said, one should not let the patients be in pain, of course, just because you're afraid that they will develop addiction or abuse, it is not right either, so to speak.

The deserving patient: This category describes how a continued practice of prescribing opioids is legitimized. Opioids can be an alternative in chronic pain when the pain can be verified through objective findings, e.g., imaging that shows pathology, and that the patient's pain is responsive to moderate doses of opioids. If long-term opioid therapy is considered, patients are to be perceived as trustworthy and adhere to the treatment plans.

P9: Yes, if it is a person who still functions socially, works full time but needs them [the opioids], i.e. lower doses and who can keep the same dose, then I have accepted it.

The prescriber needs to set the rules as well as the boundaries to avoid excessive opioid prescription, and many of the prescribers described how they before prescribing any opioids had an almost autocratic approach, demonstrating that there would be no room for negotiations regarding the opioid prescriptions. Long-term opioid therapy is only to be considered when all other treatments have failed, and is described as an exception.

P5: But in the case of long-term pain problems, then there is an indication, for certain types of pain, e.g., certain types of neuropathic pain ... and then I can think that if, if they have tried others, so, if they have tried the first and second

options, and you absolutely don't get anywhere, so it may be indicated to try opioids. BUT, under very controlled forms in such cases.

To some participants, if the patient had a known addiction and addictive behavior, then long-term opioid therapy was not an option.

P1: These people who have a clear addictive personality, that just keep on lying and fidgeting and want more and more and keep on like that, no, then there is zero tolerance, they get no pills. You know that they will just sell them to anyone.

However, participants also expressed that it was difficult to assess whether or not a patient has a problem with opioid use.

P10: I read recently, doctors are not good at assessing the risk of addiction. [...] It [laughs], it is apparently well documented. You think, you have confidence in your patient but that doesn't in any way mean that it's true, or that you can decide that when you look at a patient.

The lost patient: In this category, inadequate patient follow-up is deemed to be a major reason for continued opioid prescription. The healthcare organization, where patients receive care from several care providers at different levels of care, is described as creating situations with incoherent and uncoordinated care processes and transitions. Patients on opioids, thus, can be inherited from one prescriber to the next, without any plan for the opioid therapy or opioid cessation.

P1: Yes. Some are prescribed, so you can also see that they've sometimes been prescribed it in the emergency phase with something, then it kind of hangs there because they don't have a good follow-up or any plan to phase it out.

To inherit patients on opioids is experienced as an ethical dilemma when the prescriber disagrees with the long-term opioid therapy as a treatment for chronic pain, but continues to prescribe

opioids because the patient is reluctant to taper the medicine. Then, a pragmatic approach toward continued opioid prescription, prioritizing the patient-clinician relationship, is described.

P4: I can hardly see any indication with it [long-term opioid therapy] [laughs], and to be able to take over such an area ... it, it's quite hard. [–] Because there is a big resistance, because it will be the same thing. You have to choose your battles a little bit.

Chronic pain is considered a complex condition, especially when combined with opioid therapy, and is thought to require long and trustful provider-patient relationships. However, the participants describe how patients are expected to have only a limited number of appointments in specialized care and then be transferred to primary care for further treatment. This is thought to prohibit the prescriber from following the patient over time and providing long-term and sufficient treatment.

P15: If I start an opioid treatment, I will also follow-up on it, and there we come directly to a problem that is more healthcare organizational. [laughs] We don't always have the opportunity to follow-up our patients for as long as we want.

Regional differences in the healthcare system also mean different prerequisites for offering treatment and tapering off within the specialized pain or addiction care.

The ignorant prescriber: In this category, the understanding of prolonged opioid prescription focuses on ignorance and lack of knowledge about iatrogenic dependence, addiction, and pain management. Not knowing about alternative treatments, or the differences between acute and chronic pain conditions are factors described as prolonging opioid prescribing practices.

There is a difference in how the prescribers make assessments and obtain knowledge in regard to their clinical work. On the one hand, the importance of guidelines and official recommendations is emphasized. On the other hand, the uniqueness of every patient is thought to require individual assessment, instead of standardized routines and guidelines.

P10: But for me, I am, as I said, quite rule governed, I like to follow guidelines [–] Yes, but my patients should get the absolute best possible treatment that I can offer. [...] Not something I just shoot from the hip because it feels, it feels good.

P3: It's called knowledge support [local guidelines], but I usually call it knowledge drain. [–] Assessing a patient's needs requires a damn skilled doctor, that one knows how to do a diagnosis, and give treatment when it's relevant, but that you can also do analysis to be able to think and make a change

Lack of knowledge, commitment, or cooperation from and between healthcare providers, is thought to lead to opioids replacing other more effective therapies.

P14: I think it's ignorance and laziness. [...] I think that both emergency rooms and GPs prescribe opioids as first-hand pain relief when patients come with an acute back pain or come with an acute disc herniation. [...] So, you don't think that you can relieve pain in any other way, but you, uhm, without prescribing what you are familiar with. [–] You don't know enough about it, so you take the most powerful thing you think you have, and that is opioids.

There are experiences of a shift in attitude toward prescribing opioids. From a recognition of opioids as a safe and effective pain treatment to which patients are entitled, to a more restrictive attitude focusing on the risks and adverse effects.

P12: I can think that, in my generation at least, we should not continue and prescribe this [opioids], that people become addicted and like this ... I don't know what it's like in older generations, if they have a less strict view of this.

The compassionate prescriber: The main feature of this category is the experienced obligation to help patients with their suffering. Continued opioid prescribing practices are understood as a sign of compassion, a sometimes misdirected benevolence and an obligation to help, rather than a consequence of lack of time and resources or ignorance.

P8: I think it's because the doctor who sees these patients at the health center and feels that they want to help in some way and then hopes that it's something that passes by itself if they only get some pain relief properly for a while. Eh, and it's clear that it's for sure ... Sometimes you think it's just laxity, but I prefer to think that it's usually some kind of misguided benevolence.

This can also result in opioids being initiated on the wrong indications, e.g., existential pain or mental illness. The patient's pain and suffering can affect the prescriber emotionally, which sometimes leads to continued opioid prescribing practices.

P10: [pensive silence] I think it has to do with that the doctors have, uhm, have, are unprepared to deal with patients' suffering, [–] Uhm, but, but also very much about the need to help, usually we say. [–] Yes, but it is obvious that you want to alleviate your patient's suffering! [–] Pain arouses a lot of anxiety in doctors. It happens with me too.

Prescribing opioids can also be seen as a way to validate the patient's pain.

P10: I [the patient] have such a hard time too, that I have to take morphine. Then my pain is a little, a little easier. [...] Uhm, so if you have at least gotten morphine, then it's probably for real anyway.

A perceived responsibility for the patient's suffering is also described as driving opioid therapy. This is especially so when patients with chronic pain, who are on opioids, suffer from iatrogenic opioid dependence with pain originating from healthcare related complications.

P11: Or that it is they who end up, because we create a lot of pain conditions, unfortunately, So iatrogenic, that is and then, then we create it and then it becomes so that we continue with that prescription because you feel that you have created it.

The exposed prescriber: This category comprises the experiences of being exposed as a physician, with expectations of delivering effective treatment, and satisfying patients, colleagues, and organizational demands. Being alone, not having co-workers to consult, and not having access to multimodal pain rehabilitation, are described as contributing to continued opioid prescribing practices.

P10: Eh, and if not then like me then, who has a team behind me that helps one to deal with this anxiety ... Yes, then, then it's

easy to prescribe. But I would get, like, a [laughing] slap if I were to do something like that and my team came to me with it. Then, I would hear [both laughing] ... So, I have daily support in being able to be decisive.

The participants describe experiences of difficult and sometimes threatening situations where patients demand continued opioid prescription.

P2: Unfortunately, we also have a lot of threats and violence, um, so that, so it's sometimes the case that if you feel threatened, then it will be, then it will not be good either [laughs]

Sometimes, it can be easier to just refill the prescription, a short-term solution for a long-term problem, i.e., help the prescriber to avoid the patient's aversion and save time and effort.

P12: You can sometimes suspect that you want to get rid of a patient as well. It can be like that. It can. Or get rid of, yes, you solve the problem. If you are discharged, you don't need to hear more from this patient for a while. [—] You solve a problem in the short-term without discussions, without a lot ... It takes time like, if you have to start explaining this, if you have to question patients, if you have to start with this and that. It's not something you do in two minutes over the phone.

Discussion

In this qualitative study we used phenomenography to identify prescribers' understandings of what makes the initial opioid prescribing practice become a long-term opioid therapy. Six categories were identified: *The addictive opioid*, *The deserving patient*, *The lost patient*, *The ignorant prescriber*, *The compassionate prescriber* and *The exposed prescriber*. Prescribers' and patients' characteristics, as well as the healthcare organization contributed to the complexity of the different understandings.

The understanding of opioids as addictive, described in the category *The addictive opioid*, was the premise for the understandings and what the prescribers related to in the discourse of opioid prescribing practices. In the category *The deserving patient*, focus was on how long-term opioid therapy could be accepted, even justified, in the particular case, and illustrates the importance of perceived patient characteristics in regard to continued opioid prescribing practices. This can be problematic for the individual patient and clinician, since there is no validated test or instrument available in Sweden that can reliably identify those patients at high vs. low risk for developing problematic opioid use. Instead, clinicians rely on their own subjective assessment, which will be influenced by personal beliefs about opioids, and access to other available treatments [45]. The conception of the trustworthy patient who adheres to the prescribers' instructions, described in *The deserving patient* is in line with other qualitative

findings regarding opioid therapy for pain. Dekker et al. [46] describe how clinicians use a paternalistic manner when they discuss pain management with patients, setting boundaries to prevent excessive opioid prescription. In our study, the somewhat paternalistic attitude revealed was combined with a sense of responsibility to do what was right for the patient. A person-centered approach with shared decision-making was sought when treating patients with pain, and was used to justify continued opioid therapy, while motivating patients to taper opioids or try alternative treatments.

In the category *The lost patient*, it was understood that patients remained on opioids because of insufficient consistency in the follow-up of treatment. Passive transitions between levels of care and healthcare providers can lead to uncertainties regarding opioid treatment and pain. This, in turn, aggravates shared decision-making regarding alternative treatments to opioids and discontinuation of opioid therapy, and increases the risk of offending or stigmatizing the patient [47, 48]. Trying to avoid offending and stigmatizing the patient, or invalidating the patient's pain, was described as a driver to continued opioid therapy in both the categories *The exposed prescriber* and *The compassionate prescriber*, but in qualitatively different ways. That patients feel offended, stigmatized, and invalidated when denied continued opioid therapy has been described in previous research on chronic pain and opioid therapy [49]. Difficulties in communicating about opioids can emerge because of physicians' tendency to use ground rules, generic information about risks, or references to guidelines and clinical regulations when denying patients increased or continued opioid prescriptions, instead of using a compassionate person-centered approach with shared decision-making, [50–53]. However, this requires knowledge about opioids, alternatives to opioids, and risks with long-term opioid therapy. The category *The ignorant prescriber* describes how lack of knowledge and insufficient training in pain management and addiction medicine promotes opioid prescribing practices. This has been previously reported among prescribers, and suggestions have been made that further education in these areas are warranted [54, 55]. However also, in this category, a shift to a more restrictive attitude toward opioids was described. This corresponds with the official statistics on opioid prescription in Sweden, showing a trend of decreasing opioid prescriptions from 2013, and no increase after 2006 [56].

The category *The compassionate prescriber* can be understood from the paternalistic view of the role of the prescriber, with a moral obligation of clinicians to alleviate pain, stemming from the principles of the Hippocratic Oath. McCrorie et al. [31] argue that continued

opioid prescribing practices can seem like the least-worst option, creating an atmosphere of “pseudo-mutuality” and “pseudo-control,” for both prescriber and patient, similar to what is described in this study. The conception of opioids as a way to validate the patient’s pain was described, which is consistent with prescribing opioids as a way to express compassion [27]. Relational continuity and shared decision-making may outweigh the inconvenience and the feeling of inadequacy that occur when denying a patient continued opioid therapy. This is in line with Jensens et al.’s [57]. fMRI study of clinicians treating patients with pain, giving support for compassion-related processes in patient–clinician interactions and how they drive clinical decisions.

Continued opioid prescription was understood as a way to avoid the stressful, time-consuming, and sometimes even threatening situation of patients requesting refills of their opioid prescriptions in the category *The exposed prescriber*. The act of prescribing opioids could be a form of avoidance of uncomfortable uncertainties and disagreements [31]. Here, the patients’ and prescribers’ characteristics interacted with those of the healthcare organization, where lack of time and resources were understood as impeding evidence-based practice. These findings are similar to what Wyse et al. [52] found when they interviewed clinicians about their strategies to manage patients who were prescribed long-term opioid therapy. Lack of time as a barrier to having a person-centered approach with shared decision-making is also consistent with previous research [58].

In both categories, *The compassionate prescriber* and *The exposed prescriber*, the experiences of frustration and a fear of being inadequate in the role as a care provider promote continued opioid prescribing practices. This is consistent with previous reports of clinicians experiencing a moral distress, related to the conflict between a compassionate opioid prescribing practice and a fear of subjecting patients or the community to iatrogenic harm [20, 21]. Role conflicts and experienced inadequacy are potential risk factors for burn-out, which is relatively common among physicians [59], especially among those caring for patients with chronic pain [60]. This further support the need for support, both structural and individual, for physicians facing the challenges of opioid prescribing practices.

Strengths and limitations

The findings are based on a selected group of prescribers from different medical specialties, and given some

difficulties in recruiting participants some perspectives and variations of the phenomenon might be unexplored. Nevertheless, the fifteen participants had a long practice of prescribing opioids, as well as a variety of experiences related to pain management and prescribing opioids, generating data with richness and depth.

Transferability is often referred to that it is the reader who need to take the results forward and take under consideration what of the results that is applicable in their own context or if the research must be repeated in this other milieu [44]. To enhance transferring of the results the context and participants experiences are being thoroughly described. Even though healthcare systems differ between countries, concepts such as patient safety, person-centeredness, need of knowledge, and how individual- and organizational factors contribute to clinical decision-making, are similar for healthcare professionals, regardless healthcare setting [61]. Thus, the understandings of what makes the initial prescription of opioids become long-term opioid therapy, described in this study, may be transferable to other contexts and settings.

Implications for clinical practice and research

Phenomenography’s emphasis on variation and complexity, will in a clinical context enable a comprehensive way of understanding work. This may provide health care providers with insights that can have impact on clinical practice, health care organization and education, and patient communication [35]. Our study highlights the importance of access to organized peer support, teamwork, multimodal pain rehabilitation units, and proper training in pain management and addiction medicine for prescribers engaging in opioid prescribing practices for pain relief. It also elucidates the need for skills in communication and validation, to enable a person-centered approach without using opioids to establish a therapeutic alliance. Accessible local guidelines with treatment alternatives that comply with national guidelines and evidence-based care, together with organizational resources enabling improved transitions between healthcare providers, and incentives to engage in person-centered care, together with educational interventions on management of pain and opioids are warranted to accomplish safe and clinically indicated opioid prescribing practices [31, 48]. Further studies are needed on long-term opioid therapy with regard to benefits and risks, and how this differs between different levels of care, medical specialties, and healthcare providers.

Conclusions

The present findings are congruent with previous qualitative studies on opioid prescribing practices from different healthcare settings. Here, by using a phenomenographic approach, we contribute with new knowledge of prescribers' different understandings of how the initial practice of prescribing opioids becomes a long-term opioid therapy, by describing the variations in prescribers' experiences and conceptions. Personal characteristics of both the patient and the prescriber, as well as the healthcare organization, influence the different understandings. Opioids were understood as being addictive with long-term use promoting a downward spiral of tolerance and withdrawal driving the pain, leading to continued prescription. However, specific characteristics of a patient, e.g., opioid sensitive pain with a clear etiology, improved function and quality of life, and a trustful doctor-patient relationship, were understood as justifications for long-term opioid therapy. Poor training in pain management and addiction medicine, personal attitudes and beliefs about opioids, and a perceived professional obligation to treat patients with pain were understood to promote continued practices of prescribing opioids. Furthermore, lack of resources, inadequate follow-up of patients, and insufficient collegial support were understood as major drivers of continued prescribing of opioids, leading to clinically unindicated long-term opioid therapy.

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