

## East Tennessee State University Digital Commons @ East Tennessee State University

---

ETSU Faculty Works

Faculty Works

---

11-1-2016

# Prescription Drug Abuse Communication: A Qualitative Analysis of Prescriber and Pharmacist Perceptions and Behaviors

Nicholas E. Hagemeyer

*East Tennessee State University, [hagemeyer@etsu.edu](mailto:hagemeyer@etsu.edu)*

Fred Tudiver

*East Tennessee State University*

Scott Brewster

*East Tennessee State University*

Elizabeth J. Hagy

*East Tennessee State University*

Angela Hagaman

*East Tennessee State University, [hagaman@etsu.edu](mailto:hagaman@etsu.edu)*

*See next page for additional authors*

Follow this and additional works at: <https://dc.etsu.edu/etsu-works>

 Part of the [Community Health and Preventive Medicine Commons](#), and the [Substance Abuse and Addiction Commons](#)

---

### Citation Information

Hagemeyer, Nicholas E.; Tudiver, Fred; Brewster, Scott; Hagy, Elizabeth J.; Hagaman, Angela; and Pack, Robert P. 2016. Prescription Drug Abuse Communication: A Qualitative Analysis of Prescriber and Pharmacist Perceptions and Behaviors. *Research in Social and Administrative Pharmacy*. Vol.12(6). 937-948. <https://doi.org/10.1016/j.sapharm.2015.12.008> ISSN: 1551-7411

This Article is brought to you for free and open access by the Faculty Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in ETSU Faculty Works by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact [digilib@etsu.edu](mailto:digilib@etsu.edu).

---

# Prescription Drug Abuse Communication: A Qualitative Analysis of Prescriber and Pharmacist Perceptions and Behaviors

## **Copyright Statement**

© This document is an author manuscript from [PMC](#). The publisher's final edited version of this article is available at *Research in Social and Administrative Pharmacy*.

## **Creator(s)**

Nicholas E. Hagemeyer, Fred Tudiver, Scott Brewster, Elizabeth J. Hagy, Angela Hagaman, and Robert P. Pack



# HHS Public Access

Author manuscript

*Res Social Adm Pharm.* Author manuscript; available in PMC 2017 November 01.

Published in final edited form as:

*Res Social Adm Pharm.* 2016 ; 12(6): 937–948. doi:10.1016/j.sapharm.2015.12.008.

## Prescription Drug Abuse Communication: A Qualitative Analysis of Prescriber and Pharmacist Perceptions and Behaviors

**Nicholas E. Hagemeyer, PharmD, PhD,**

Assistant Professor, Department of Pharmacy Practice, East Tennessee State University Gatton College of Pharmacy

**Fred Tudiver, MD,**

Professor, Department of Family Medicine, East Tennessee State University Quillen College of Medicine

**Scott Brewster, PharmD Candidate,**

East Tennessee State University Gatton College of Pharmacy

**Elizabeth J. Hagy, PharmD Candidate,**

East Tennessee State University Gatton College of Pharmacy

**Angela Hagaman, MA, and**

East Tennessee State University College of Public Health

**Robert P. Pack, MPH, PhD**

Professor, Department of Community and Behavioral Health, East Tennessee State University College of Public Health

### Abstract

**Background**—Interpersonal communication is inherent in a majority of strategies seeking to engage prescriber and pharmacist health care professionals (HCPs) in the reduction and prevention of prescription drug abuse (PDA). However, research on HCP PDA communication behavioral engagement and factors that influence it is limited.

**Objectives**—This study quantitatively examined communication behaviors and trait-level communication metrics, and qualitatively described prescription drug abuse-related communication perceptions and behaviors among primary care prescribers and community pharmacists.

---

Corresponding Author: Nicholas E Hagemeyer, PharmD, PhD, ETSU Gatton College of Pharmacy, Department of Pharmacy Practice, Box 70657, Johnson City, TN 37614, Office: 423-439-6239, Fax: 423-439-6784, hagemeyer@etsu.edu.

#### Funding Disclosure:

Research reported in this publication was supported by the National Institute On Drug Abuse of the National Institutes of Health under award number R24DA036409. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

**Publisher's Disclaimer:** This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Methods**—Five focus groups (N=35) were conducted within the Appalachian Research Network (AppNET), a rural primary care practice-based research network (PBRN) in South Central Appalachia between February and October, 2014. Focus groups were structured around the administration of three previously validated trait-level communication survey instruments, and one instrument developed by the investigators to gauge HCP prescription drug abuse communication engagement and perceived communication importance. Using a grounded theory approach, focus group themes were inductively derived and coded independently by study investigators. Member-checking interviews were conducted to validate derived themes.

**Results**—Respondents' trait-level communication self-perceptions indicated low communication apprehension, high self-perceived communication competence, and average willingness to communicate as compared to instrument specific criteria and norms. Significant variation in HCP communication behavior engagement was noted specific to PDA. Two overarching themes were noted for HCP-patient communication: 1) influencers of HCP communication and prescribing/dispensing behaviors, and 2) communication behaviors. Multiple sub-themes were identified within each theme. Similarities were noted in perceptions and behaviors across both prescribers and pharmacists.

**Conclusions**—Despite the perceived importance of engaging in PDA communication, HCPs reported that prescription drug abuse communication is uncomfortable, variable, multifactorial, and often avoided. The themes that emerged from this analysis support the utility of communication science and health behavior theories to better understand and improve PDA communication behaviors of both prescribers and pharmacists, and thereby improve engagement in PDA prevention and treatment.

### Keywords

Communication; Prescriber; Pharmacist; Prescription Drug Abuse; Qualitative

---

## INTRODUCTION

Prescription drug abuse, considered the United State's (US) fastest growing drug problem, has been associated with significant morbidity and mortality in recent decades.<sup>1,2</sup> Deaths related to prescription opioid analgesic (POA) overdoses have quadrupled in the US since 1999.<sup>2</sup> Since 2009, the number of POAs dispensed by US retail pharmacies has consistently exceeded 200 million.<sup>3</sup> POA abuse and addiction are potential adverse effects associated with prescription opioids, and are noted public health concerns in the US.

Specific to health care providers, national and state-level efforts to reduce prescription drug abuse and the ramifications thereof have included increased education about appropriate POA prescribing and dispensing, increased sharing and use of data between state prescription drug monitoring programs, increased emphasis on appropriate and timely medication disposal, increased screening for drug abuse, and increased access to addiction treatment.<sup>1,4</sup> Many of the aforementioned efforts have been targeted at front-line health care providers such as POA prescribers and community pharmacists. Significant research has been conducted to examine prescribers' and pharmacists' perceptions and behaviors related to prescription drug monitoring programs<sup>5-12</sup> and general attitudes toward prescription drug

abuse and interventions that could mitigate it.<sup>13–18</sup> Overall, research suggests providers perceive prescription drug abuse to be a problem in their practice settings and communities;<sup>16,17,19</sup> moreover, providers express support for interventions that could reduce prescription drug abuse.<sup>10,13–15,20</sup>

Interpersonal communication is inherent in a majority of strategies seeking to engage health care professionals in the reduction and prevention of prescription drug abuse. However, research exploring provider communication behaviors specific to prescription drug abuse is limited.<sup>20–22</sup> To better understand behavioral engagement in prescription drug abuse-related communication, the research team performed five focus groups with prescribers and pharmacists in South Central Appalachia who were actively engaged in POA prescribing and dispensing. One goal of the focus groups was to inform adaptation of McCroskey et al's trait-level communication apprehension,<sup>23</sup> self-perceived communication competence,<sup>24</sup> and willingness to communicate<sup>25</sup> assessments to situational prescription drug abuse-specific communication and evaluate behavioral engagement across multiple situations (see details below). The objectives of this manuscript are: 1) to quantitatively describe communication behaviors and trait-level communication metrics in our study sample; and 2) to qualitatively describe prescription drug abuse-related communication perceptions and behaviors of prescribers and pharmacists with patients.

## METHODS

### Participants and Focus Groups

Employing a qualitative study design, the investigators conducted five focus groups within the Appalachian Research Network (AppNET), a rural primary care practice-based research network (PBRN) in South Central Appalachia, between February and October, 2014.<sup>26,27</sup> Focus groups consisted of two prescriber-specific groups, two pharmacist-specific groups, and one interprofessional (prescribers and pharmacists) group. The location of each focus group varied. Two were conducted at participants' practice settings, one at a geographically centralized practice setting at which none of the participants practiced, another at a conference attended by primary care providers and pharmacists, and one at a centrally-located academic institution.

Prescriber focus groups were purposively sampled to include all active primary care providers (PCPs) and clinic directors within a particular clinic. Pharmacist focus groups were purposively sampled to include community pharmacists practicing within similar geographical areas (i.e., within the same communities). The interprofessional focus group purposively included both prescribers and pharmacists attending the annual AppNET conference. Researchers distributed and reviewed the informed consent document and confidentiality requirements prior to obtaining written consent from participants and before beginning each focus group. Participants were compensated for their time with a modest honorarium. A total of 35 prescribers and pharmacists participated in the focus groups (median=6/group; range=6–9). The investigators used a semi-structured interview guide (Appendix) designed to facilitate group discussion around communication issues between prescribers, pharmacists, and patients regarding prescription drug abuse. All focus groups were moderated by a minimum of two study authors (NH, FT, AH). Focus groups were

approximately 60–80 minutes in duration. All focus groups were audiotaped and transcribed verbatim. The investigators and research assistants took field notes during each focus group.

### Survey Instruments

Focus groups were structured around the administration of four brief survey instruments; three developed by McCroskey and colleagues to evaluate perceptions of communication apprehension, self-perceived communication competence, and willingness to communicate, and one instrument developed by the investigators to gauge prescription drug abuse communication engagement. The Personal Report of Communication Apprehension (PRCA-24) was used to assess trait-level communication apprehension.<sup>23</sup> The PRCA-24 allows calculation of aggregate communication apprehension scores as well as group, interpersonal, meeting, and public speaking domain scores. Higher scores on the PRCA-24 indicate increased apprehensiveness when communicating. The Self-Perceived Communication Competence (SPCC) Questionnaire was administered to assess communication competence.<sup>24</sup> Both aggregate and sub-domain (e.g., acquaintance, dyad, friend, group, meeting, public speaking, stranger) scores were calculated. Higher SPCC scores indicate increased perceptions of communication competence. Respondent willingness to communicate was assessed using the Willingness to Communicate (WTC) Scale.<sup>25</sup> Aggregate and sub-domain WTC scores were calculated in the same way SPCC scores were calculated. Higher WTC scores indicate increased willingness to communicate across multiple situations. Overall, each of the instruments assesses trait-level communication perceptions across multiple audiences, ranging from close friends to groups of strangers, and contexts, ranging from interpersonal communication to public speaking.

The prescription drug abuse communication behavior instrument evaluated the extent of engagement in nine prescription drug abuse prevention/treatment behaviors and the perceived importance of engaging in each behavior. Using a 0–10 scale, focus group participants were asked to estimate the frequency (e.g., X out of 10 times that I have this opportunity I have this conversation) of engagement in prescription drug abuse conversations with their patients. All of the behaviors included in the investigator-developed instrument were based on nationally recognized prevention/treatment strategies.<sup>1,4</sup> The 4 aforementioned survey instruments facilitated discussions during the interviews of how best to transform trait-like survey instruments into prescription drug abuse-specific instruments and the role of communication in addressing prescription drug abuse with patients and other providers.

### Data Analysis

PRCA-24, SPCC, and WTC scores and sub-scores were calculated for all focus group participants. Scores were calculated based on standardized scoring procedures for each instrument.<sup>23–25,28</sup> Descriptive statistics were calculated for participant prescription drug abuse-related behaviors and communication survey assessment scores.

Using a grounded theory approach, focus group themes were inductively derived and coded independently by two of the study investigators (NH, FT).<sup>27,29</sup> Emerging themes were iteratively refined throughout the course of the focus group conduction. Saturation was

achieved by the fourth focus group. A third investigator (RP) was available to resolve discrepancies in coding. Major themes and sub-themes were finalized, and the quotes that most accurately illustrated the themes (exemplar quotes) were identified. Validation of the data was achieved by conducting member-checking interviews<sup>30</sup> with five participants from the focus groups after compilation of the final draft of themes. Themes were then refined based on member-checking interviews.

Approval was obtained from X University's Institutional Review Board prior to study conduction.

## RESULTS

Demographic characteristics of the study sample are presented in Table 1. The study sample was approximately evenly divided across gender and prescriber/pharmacist categories. Descriptive statistics for prescription drug abuse communication behaviors and communication scores are presented in Tables 2 and 3, respectively. Health care professionals most often engaged in discussing the results of a prescription drug monitoring program query, concerns regarding a patient's drug-taking behaviors, and the abuse potential of prescribed medications. All communicative behaviors were considered by a majority of study participants to be extremely important conversations in which to engage patients. Respondents' overall PRCA-24, SPCC, and WTC scores indicated relatively low communication apprehension, relatively high self-perceived communication competence, and average willingness to communicate when compared to instrument specific criteria and norms.<sup>28</sup> Respondents indicated their lowest level of communication apprehension in interpersonal communication scenarios. Similarly the highest level of communication competence was noted in the dyadic communication domain. Willingness to communicate was highest when communicating with a friend and lowest when communicating with a stranger. Reflective of prescription drug abuse provider-patient communication contexts, dyadic and interpersonal communication sub-scores revealed average communication apprehension, communication competence, and willingness to communicate scores. Approximately 15% of focus group participants reported high apprehension, low communication competence, and low willingness to communicate.

Two overarching themes were noted for health care professional (HCP – both prescribers and pharmacists)-patient communication: 1) influencers of HCP communication and prescribing/dispensing behaviors; and 2) communication behaviors. Sub-themes were identified within each theme, are described below, and are presented in Table 4.

### **Influencers of HCP Communication and Prescribing/Dispensing Behaviors**

Seven sub-themes were identified within the influencers of HCP communication and prescribing/dispensing behaviors theme: 1) subjective vs. objective patient information; 2) practice setting barriers; 3) patient relationships; 4) level of HCP training and experience; 5) pharmacists' lack of patient information; 6) fear of patient responses; 7) individual and practice setting policies.

**Subjective vs. objective patient information**—Both prescribers and pharmacists commented often that the subjectivity inherent in pain management and prescription drug abuse and addiction influenced their communicative and prescribing/dispensing behaviors. HCPs emphasized the weight of relatively objective factors, “hard evidence”, or “red flags” when determining their patient care and communication approaches. Commonly cited hard evidence included urine drug screen results, results of prescription drug monitoring program (PDMP) queries, distance travelled to a clinic/pharmacy, and patient age.

One physician said, “If you’ve got someone with a drug screen that’s positive, it’s a pretty easy discussion because you can...almost technicalize that without having to...be judgmental, whereas if you just notice weird behaviors, that’s a little hard to deal with.” Similarly, a pharmacist said, “If it’s someone who, you look at the database (PDMP) and they’ve seen multiple physicians, and gotten multiple scripts, then you want to confront them about it and ask them about it, and you want to notify the prescriber who wrote the current prescription.”

HCPs highlighted the distinction between evidence and suspicion of prescription drug abuse. One pharmacist noted, “I suspect a lot of patients have [prescription drug abuse] problems, but only a few I can prove.” A physician noted, “When you look [at the PDMP] and they’ve got prescriptions somewhere they weren’t supposed to or they failed their drug test then I can say ‘Look, it’s not just my gestalt that you’re pulling one over, but I’ve got proof.’”

Regarding the subjectivity inherent in the treatment of pain and the detection of abuse, one nurse practitioner stated, “There’s so much of pain that’s subjective.” Prior to communicating with a patient about a prescription drug abuse concern, HCPs overwhelmingly preferred to have proof of abuse. It was seldom explored as part of routine patient care. One physician said, “You have to have some degree of belief that that’s [abuse] going on.” The fear of undertreating legitimate pain was also mentioned: “I think one thing that does make me a little bit worried or apprehensive...if I do make a mistake and I thought it was drug seeking and it really wasn’t, and they perhaps had pain beyond a level that I appreciated...and perhaps their life at home really was that painful and things. I hope that I’m pretty good at not missing those truly in pain.” When considering the subjective nature of prescription drug abuse, HCPs also mentioned the possibility of getting duped by patients. A nurse practitioner said, “You want do the right thing for the patient but at the same time you don’t want to be taken advantage of and be doing the wrong thing.”

**Practice setting barriers**—Prescribers and pharmacists commonly indicated practice time constraints as a barrier to engaging patients in prescription drug abuse communication. A nurse practitioner explained, “You’re given 15–20 minutes per patient so when you’re looking at controlled substances on top of hypertension and diabetes...it becomes problematic in trying to address everything you’re suppose to.” A pharmacist said, “I worked nine hours by myself and filled 300 prescriptions. I didn’t get a lunch break and I didn’t get a bathroom break. I don’t know how anyone is going to have time [to engage patients in prescription drug abuse communication] when you are expected to work under the normal circumstances like that. If I really care about patients, I want to do it correctly. And if we can’t do it well then we don’t want to do it at all.”



HCPs highlighted the relationship between perceived time constraints and financial consequences. A physician noted, “If you took time to do all of this [engage in prescription drug abuse communication]...you’d be broke is another way of saying it.” Another physician stated, “In terms of referring them to [addiction] treatment centers, actually that’s much more time consuming to me than just to say ‘look you failed, you’re fired.’ And we’re not paid for it either.” Both prescribers and pharmacists noted the business aspects of their prescribing and dispensing behaviors. The perception that physicians meet specific patient load requirements, and the financial ramifications of not doing so, was mentioned. One prescriber said, “I mean, you’ve got to make a number. You’ve got to stay busy.” A community pharmacist owner said, “It’s an interesting paradigm...we have the least amount of reimbursement that we’ve ever had. Cash flow is an issue with everybody. And then you get someone who comes in with a prescription that is \$1000 cash, and all of a sudden we are the bad guy for filling it, because we fill something that we shouldn’t.”

Prescribers, in particular, noted the impact of addressing prescription drug abuse with patients on clinic, institutional and/or personal metrics, such as patient satisfaction ratings and meaningful use scores. A nurse practitioner noted, “I have heard conversations in the past of providers fearing losing scores by not fulfilling the patients’ desires, by not giving them what they need, as far as medication goes because she did...she went and wrote a formal complaint against me and that’s a ding against me. When really I was looking out for her.” A physician similarly noted, “There’s all these benchmarks, and we want high scores so we’re trying to make sure we get that. We all agree that this [prescription drug abuse] is a difficult problem but trying to find that time to do it [communicate] is a challenge.”

Regarding a lack of resources, a physician said, “In my area I don’t think we even have anyone as far as [addiction] treatment is concerned.” A nurse practitioner noted, “We don’t have good resources to send somebody who probably is addicted, or abusing. What do you do with them?” Similarly, a pharmacist stated, “He was the one who asked for a recommendation for a place to go to around here. I said, ‘All we know are the pill mills.’ We don’t want him to go to one of those places.” Variation was also noted as to what was considered a resource:

NH: What types of prescription drug abuse information and addiction treatment information do you have in your clinic that you can give to patients?

MD1: We haven’t got anything do we?

MD2: We’ve got a social worker.”

Those providers that indicated they do have some resources in their clinics indicated barriers to providing timely information. A physician noted, “We do have a list of places and phone numbers where they can go in for substance abuse treatment...but it’s hard to keep all of that updated.”

**Patient relationships**—Pharmacists and prescribers indicated that the depth of the HCP-patient relationship could impact engagement in prescription drug abuse communication. Some HCPs noted that communication is more likely with established patients. A nurse practitioner said, “I feel like with an established patient I can say, ‘now come on...why are

you still on this or what's going on? Tell me for real.” Conversely, another nurse practitioner said, “I think it's easier to be strong when it's a new patient. It's a different story when it's someone you've seen for months or even years and then it's an issue. Because you've got some history with the patient.” A pharmacist said, “I work in a town that I was born in. You want to keep up just a good positive relationship with them so this is very negative to bring up, so that's difficult and knowing that I will continue to see the same patients over and over again. There will be awkwardness.”

**Level of HCP training and experience**—Prescribers, in particular, highlighted the role of their training and experience level in decisions to address abuse and addiction. A nurse practitioner noted, “Am I trained in pain management? About as well as any other primary care provider is.” Physicians described the entry into practice post-residency as critical in establishing an approach to handling pain management and prescription drug abuse concerns. One physician said, “When I was the new guy, my schedule was packed with all the druggies. Everybody came in just wanting Lortab™ and Xanax™.” Two experienced physicians conversed, MD1: “I think it's much easier having some experience as a physician too. It's much easier now than it was right after I got out of training. Probably one because of experience and two because I've got a full practice and I really don't care if I make you mad and if you leave because it's not going to hurt me financially. Whereas if your schedule's not full then you're more apt to...MD2: “give all the pain medication you want.”

**Pharmacists' lack of patient information**—Community pharmacists perceived difficulty in engaging in communication based on a lack of accessible patient information that could inform their communication approaches. One pharmacist said, “I don't know enough about you to know if this is a safe dose for you. What kind of pain? What is being treated? I think you [pharmacists] are entitled to know more than that. And you have to know more than that.” Another pharmacist commented, “I think what's getting lost in the shuffle is knowledge about the patient.” Another pharmacist said: “Get access to medical records. That would answer so many questions.” Pharmacists also commented on their reliance on the PDMP and the challenges of accessing the required data quickly. “You know, I've got a patient waiting for me to make a decision and...I can't even look at the database [PDMP]. I can't say come back in an hour, I'm going to be closed in an hour. You know... what do you do with that?”

**Fear of patient responses**—Fear of patient response caused apprehension in the decision to communicate specific to prescription drug abuse, as well as the decision to prescribe or dispense controlled substances. One pharmacist said, “We have become cynical, and you can communicate all you want to, but we have become cynical, and kind of afraid.” Another noted, “Some patients are scary that are abusing drugs and those I just sort of...I legitimately fill [the prescription]. I don't do anything illegal, but I'm thinking, they're just going to go out here and sell this.” A physician described the dissonance between fear of certain patients and professional responsibility, “I feel intimidated when I'm in the room with [one patient]...she has never been aggressive, never talked to me in an abusive fashion but she comes off as a very aggressive person. And so I do feel intimidated when I'm with her, but I'm not going to back down because I'm accountable for what I do.” Prescribers also

mentioned differences in fear perceptions across patient gender. One conversation went as follows:

“MD1 (male): It’s a lot easier to have a conversation with females that fail [a drug screen or PDMP query] for me than the men, and I think the primary reason is because men...you just worry they’re going to get violent and explode.

MD2 (female): See I think I’m the opposite. I think I’d rather have a conversation with a male.

MD1: Really.

MD2: Maybe it’s because I don’t like all the females to cry on me you know...

MD1: I just never...I never read about the females pulling out a hand gun and blowing away half the clinic and stuff.”

**Individual and practice setting policies**—Prescribers and pharmacists routinely described individual and setting-specific policies that are employed to guide communication and prescribing and dispensing behaviors. Policies included establishment of setting-specific maximum patient capacities, development of pain/addiction treatment contracts, and establishment of inclusion and exclusion criteria based on patient or prescriber characteristics. Whereas the techniques differed across prescribers and dispensers, the concepts were similar. Regarding maximum patient capacities, one pharmacist mentioned, “Right now we have an established patient load of about 25–30 patients [on Suboxone™ for the treatment of addiction]. And we are not taking any new ones on Suboxone™.” One nurse practitioner stated the following in regards to maximum patient capacities, “The most appealing thing about coming to this office was the fact that our policy is we do not prescribe controlled substances...but in hindsight coming aboard and taking on patients that other prescribers have seen in the past that have had controlled substances prescribed to them by other prescribers and having to continue doing that...well it’s a reality check for me. Trying to hold to the standard of not prescribing to those patients has been very, very challenging.”

Regarding policy development, one pharmacist noted, “I actually made a Suboxone™ contract...wrote it up and all of our patients have to sign a contract.” Other pharmacists mentioned employing “all or none” policies that require patients to get all of their prescription medications, controlled and non-controlled substances, filled at one pharmacy. Physicians employed individual policies to direct their practice behaviors, including development of stepwise processes for prescribing and patient discharge from practices. One physician said, “You like to think what we’re trying to do is help these people fix their problems and some people, I mean, to be quite honest, it’s just not pleasant to deal with. I mean, I just discharge you and I’m done. That’s awful to say but it’s true.” Similarly, another physician conversation went as follows:

“MD1: Usually they’ll fail the drug screen or the prescriber database and that takes care of it. We discharge from the practice. Now the one thing I don’t think we do is say ‘Hey here are some treatment centers’, do we?”

MD2: No we don't

MD1: We probably ought to say here's some options..."

MD2: Here's some options for treatment. We just...I don't know.

MD3: But you're too ticked off at them."

### Communication Approaches and Behaviors

Prescribers and pharmacists employed multiple approaches to communicate with patients about prescription drug abuse: 1) standard operating conversations; 2) consequential communication; and 3) communication avoidance.

**Standard operating conversations**—Prescribers, in particular, mentioned employing standard operating conversations. One physician said, "I'll be direct and I'll say well you know 'I don't know you. I don't prescribe these medications on the first visit. If I see you for a couple times and think you need them I might prescribe them but there's a good chance I might not.'" A nurse practitioner noted, "I have had patients who got up and walked out of the room when I go in because the nurse will tell them ahead of time that we don't prescribe narcotics and they're here for back pain and that I'm not going to give them narcotics. I go in and I confirm that it's not going to happen...I expect my management to back me up on that, because that's the right thing to do."

One pharmacist, when uncomfortable with a dispensing scenario employed a standard safety conversation with patients. The pharmacist stated, "[I'll say] 'I don't know who you are, I don't know this doctor. I can't get ahold of them to figure out what you've been on, so forth and so on, and I can't fill this because I don't feel like this is a safe dose for you at this point in time.' In the end, that's my go-to. It's just not safe."

**Consequential communication**—Some HCPs employed consequential conversations to promote prescription drug abuse prevention and gather patient information. A physician stated, "I do it [discuss medication storage] with almost every patient, I say, 'Do you have a lock box or a safe? If any of this stuff gets stolen then you're going to be in deep problems concerning your pain and withdrawal.' So I'm telling them to keep it locked up...they know if it gets lost or stolen not to call me for an early refill." When exploring prescription drug abuse, one pharmacist said, "If I come across one [PDMP report] that says they skipped February [didn't have a prescription filled during February], I know there's a problem and I'll ask them 'Where did you get this filled last time? This isn't going to be filled until you tell me. It will be a whole lot quicker if you just go ahead and tell me where you got this filled because then I can call and get the date [of the last fill].' And usually they just go ahead and tell me because they don't want to sit there all day." Similarly, a physician described, "When we suspect this [abuse] and they do fall out [fail] on some parameter [urine drug screen or PDMP query], we let them know that they've fallen out, that we are concerned, and we quit prescribing for them and then we discharge them from the practice. And that's sort of the end of it." Related to consequential communication, contractual communication was also employed, particularly by prescribers. One prescriber said, "We have this form and it's got three copies to it...And I say, 'Now remember, you can never

increase the number, and you can never increase the strength.’ It’s a small percent of the patients we see a day, but for us it’s the part that we stress ourselves with. That, and maybe somebody dying.”

**Communication avoidance**—Both prescribers and pharmacists commonly engaged in communication avoidance behaviors and conversations with patients. The approaches enabled providers to avoid difficult or confrontational situations. A pharmacist explained, “I think personally I would just rather go with the flow than confront issues like that; it’s definitely harder to confront.” Some pharmacists mentioned lying to patients to avoid perceivably difficult conversations. One pharmacist said, “I just tell them I don’t have them [prescribed medications].” Prescribers mentioned placing communicative responsibility on practice staff. A physician noted, “We have somebody who makes our new patient appointments and who tells people upfront we don’t prescribe medications unless for legitimate reasons.” When discussing abuse detection activities, another physician said, “Oh gosh I hate this, my nurse does all that. I tell her and she can do it [call a patient to come to the office for an unannounced pill count] on her own if she wants.”

Some physicians referred patients to other providers to avoid difficult cases. A physician said, “I mean if I think someone’s abusing something and I’ve got some sort of proof or strong feeling they are, I don’t have a problem telling them that. I’ll just tell them ‘I think this is a problem and I’m not going to write your pain medications anymore. I can refer you to a pain clinic.’” Likewise, pharmacists mentioned referring patients back to their prescribers to explore medication-taking behaviors. A pharmacist explained, “If it’s a situation of, you know, a patient coming back 15 days after a 30 day fill wanting it filled and you discuss that with them as far as, ‘Hey you know, you’re taking more than prescribed, you might want to talk to your doctor about if it’s not adequate or if you’re needing more medication.’ I don’t ever accuse anybody of abuse of drugs or anything like that.”

Prescribers also mentioned avoiding communication related to exploration of patients’ illnesses. One prescriber noted, “I think to say ‘No’ [to prescribing a controlled substance to a patient] as compared to saying ‘Hey I think you’re hooked.’ It’s one thing to say no. It’s another thing to address the root problem. And somebody that’s going to become argumentative and stuff I’m going to just say no and not really address the root problem...I may just choose to fire you versus trying to help you with your problem.”

## DISCUSSION

This study is the first to describe prescription drug abuse (PDA)-related communication perceptions and behaviors of prescribers and pharmacists with patients. Few respondents reported trait-level communication perceptions that could hinder overall communication engagement. Yet, despite the perceived importance of engaging in PDA communication, respondents reported that prescription drug abuse communication is uncomfortable, variable, multifactorial, and often avoided. Our findings indicate similarities in perceptions and behaviors across both prescribers and pharmacists. Overall, multiple factors are considered by providers when choosing to engage in PDA communication, and multiple approaches, are employed to minimize real and perceived difficult conversations.

While communication apprehension, competence, and willingness were infrequently mentioned verbatim by focus group participants, the sub-themes that presented in the analysis align with the aforementioned constructs. Fear of patient responses, a lack of objective evidence of abuse, and fear of damaging patient relationships, for example, indicate potentially elevated situational apprehension. Respondents indicated feeling more confident in their ability to communicate with increased training or experience and the presence of “hard” evidence. Similarly, practice setting barriers, a lack of objective evidence, a lack of pharmacist information, fear of damaging patient relationships, and fear of a patient’s response to communication all decrease one’s willingness to communicate in PDA situations.

The PDA-related behaviors reported by prescribers and pharmacists indicate that PDA-related communication avoidance is common. Importantly, highly apprehensive situations, either real or perceived, predict communication avoidance.<sup>31</sup> Whereas the trait-level communication instruments employed in this study did not capture widespread communication apprehension or other communication factors that indicate prescribers and pharmacist may avoid communication, the state-level questions asked in the focus groups revealed routine engagement in communication avoidance behaviors. To date, state-level communicative analyses in health care settings have been primarily limited to the perspective of the patient.<sup>32–34</sup> These studies indicated communication apprehension and avoidance interfere with provider-patient relationships and are associated with negative patient outcomes.<sup>34</sup> The results of our qualitative analysis support that apprehension and communication avoidance often result in PDA conversations that are not patient-centered (e.g., lying to patients, firing patients, failing to recommend patients for treatment when appropriate), or in no conversations at all.

Interventions to improve communication skills and correct communication perceptions of health care professionals are approaches to improving PDA prevention and treatment given that communication is inherent in these strategies. McCroskey and colleagues pointed out that interventions developed to decrease situational communication apprehension and avoidance have two potential targets: improving situational communication skills (i.e., a behavioral emphasis) and decreasing situational apprehension (i.e., a cognitive emphasis).<sup>35</sup> Considering our prescribers and pharmacists, improving patient-centered communication skills through motivational interviewing-based training, for example, could decrease communication avoidance in those individuals who lack communication skills. Ideally, skills would be externally evaluated, in addition to a self-assessment. Similarly, interventions such as systematic desensitization have been shown to decrease communication apprehension in health professions students.<sup>36</sup> Importantly, interventions need to be targeted to the needs of the communicators. Attempting to reduce apprehension in a provider who has low or appropriate situational communication apprehension would be ineffective if communication skills are the limiting factor in PDA communication engagement.

Additional avoidance behaviors were influenced by factors that could be considered outside the realm of communication science. Time and financial pressures are two examples. Incorporation of additional behavior theories, such as the theory of planned behavior could

also inform provider willingness to engage in PDA prevention and treatment efforts and interventions to positively impact these efforts.<sup>37</sup>

### Limitations

The geographic specificity of this study in Northeast Tennessee and the limited sample size limit the generalizability of the perceptions to other prescribers and pharmacists. Only perspectives of prescribers and pharmacists were gathered in this study. Patients' perceptions would further inform our work and future research in this area.

### Conclusion

To the authors' best knowledge, this is the first study to examine situational communication perceptions specific to prescription drug abuse. Prescribers and pharmacists reported multiple factors that influence their engagement in PDA communication. Prescribers and pharmacists also indicated communication is important, yet variable in its frequency, quality, and intent. The themes that emerged from this analysis support the utility of communication science and health behavior theories to better understand and improve PDA communication behaviors of both prescribers and pharmacists, and thereby improve engagement in PDA prevention and treatment. The results of this qualitative study can inform future quantitative studies of HCP-patient communication with regard to PDA.

### Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

### References

1. Office of National Drug Control Policy. Epidemic: Responding to America's Prescription Drug Abuse Crisis. Washington, DC: 2011.
2. Chen LH, Hedegaard H, Warner M. QuickStats: rates of deaths from drug poisoning and drug poisoning involving opioid analgesics - United States, 1999–2013. *MMWR Morb Mortal Wkly Rep.* 2015; 64:32.
3. Volkow, ND. Senate Caucus on International Narcotics Control. National Institute on Drug Abuse; 2014. America's addiction to opioids: heroin and prescription drug abuse.
4. Office of National Drug Control Policy. National Drug Control Strategy - 2014. Washington, DC: Executive Office of the President of the United States; 2014.
5. Fleming ML, Barner JC, Brown CM, Shepherd MD, Strassels S, Novak S. Using the theory of planned behavior to examine pharmacists' intention to utilize a prescription drug monitoring program database. *Res Social Adm Pharm.* 2014; 10:285–296. [PubMed: 23816495]
6. Gavaza P, Fleming M, Barner JC. Examination of psychosocial predictors of Virginia pharmacists' intention to utilize a prescription drug monitoring program using the theory of planned behavior. *Res Social Adm Pharm.* 2014; 10:448–458. [PubMed: 23953982]
7. Fleming ML, Chandwani H, Barner JC, Weber SN, Okoro TT. Prescribers and pharmacists requests for prescription monitoring program (PMP) data: does PMP structure matter? *Journal of Pain and Palliative Care Pharmacotherapy.* 2013; 27:136–142. [PubMed: 23688495]
8. Wixson SE, Blumenschein K, Goodin AJ, Talbert J, Freeman PR. Prescription drug monitoring program utilization in Kentucky community pharmacies. *Pharm Pract (Granada).* 2015; 13:540. [PubMed: 26131042]

9. McAllister MW, Aaronson P, Spillane J, et al. Impact of prescription drug-monitoring program on controlled substance prescribing in the ED. *Am J Emerg Med.* 2015; 33:781–785. [PubMed: 25842283]
10. Rutkow L, Turner L, Lucas E, Hwang C, Alexander GC. Most primary care physicians are aware of prescription drug monitoring programs, but many find the data difficult to access. *Health Aff (Millwood).* 2015; 34:484–492. [PubMed: 25732500]
11. Ringwalt C, Garrettson M, Alexandridis A. The effects of North Carolina’s prescription drug monitoring program on the prescribing behaviors of the state’s providers. *J Prim Prev.* 2015; 36:131–137. [PubMed: 25466768]
12. Irvine JM, Hallvik SE, Hildebran C, Marino M, Beran T, Deyo RA. Who uses a prescription drug monitoring program and how? Insights from a statewide survey of Oregon clinicians. *J Pain.* 2014; 15:747–755. [PubMed: 24787089]
13. Hwang CS, Turner LW, Kruszewski SP, Kolodny A, Alexander GC. Primary Care Physicians’ Knowledge And Attitudes Regarding Prescription Opioid Abuse and Diversion. *Clin J Pain.* 2015
14. Cochran G, Field C, Lawson K, Erickson C. Pharmacists’ knowledge, attitudes and belief regarding screening and brief intervention for prescription opioid abuse: a survey of Utah and Texas pharmacists. *Journal of Pharmaceutical Health Services Research.* 2013; 4:71–79.
15. Cochran G, Field C, Lawson K. Pharmacists who screen and discuss opioid misuse with patients: future directions for research and practice. *Journal of Pharmacy Practice.* 2014; doi: 10.1177/0897190014522064:1-9
16. Hwang CS, Turner LW, Kruszewski SP, Kolodny A, Alexander G. Prescription drug abuse: A national survey of primary care physicians. *JAMA Internal Medicine.* 2015; 175:302–304. [PubMed: 25485657]
17. Hagemeier NE, Murawski MM, Lopez NC, Alamian A, Pack RP. Theoretical exploration of Tennessee community pharmacists’ perceptions regarding opioid pain reliever abuse communication. *Res Social Adm Pharm.* 2014; 10:562–575.
18. Saveland C, Hawker L, Miedema B, Macdougall P. Abuse of family physicians by patients seeking controlled substances. *Can Fam Physician.* 2014; 60:e131–136. [PubMed: 24522691]
19. Hagemeier NE, Gray JA, Pack RP. Prescription drug abuse: A comparison of prescriber and pharmacist perspectives. *Substance Use and Misuse.* 2013:1–8. Early online. [PubMed: 23153043]
20. Fleming ML, Barner JC, Brown CM, Shepherd MD, Strassels SA, Novak S. Pharmacists’ training, perceived roles, and actions associated with dispensing controlled substance prescriptions. *J Am Pharm Assoc.* 2014; 54:241–250.
21. Shimane T, Matsumoto T, Wada K. Clinical behavior of Japanese community pharmacists for preventing prescription drug overdose. *Psychiatry Clin Neurosci.* 2015; 69:220–227. [PubMed: 25112197]
22. Hagemeier NE, Murawski MM, Alamian A, Pack RP. Factors associated with provision of addiction treatment information by community pharmacists. *Journal of Substance Abuse Treatment.* 2014 in press.
23. McCroskey JC. Validity of the PRCA as an index of oral communication apprehension. *Communication Monographs.* 1978; 45:192–203.
24. McCroskey JC, McCroskey LL. Self-report as an approach to measuring communication competence. *Communication Research Reports.* 1988; 5:108–113.
25. McCroskey JC. Reliability and validity of the willingness to communicate scale. *Communication Quarterly.* 1992; 40:16–25.
26. Morgan, DL. Focus groups as qualitative research. Newbury Park, CA: Sage Publications; 1988.
27. Morgan, DL. Successful focus groups: Advancing the state of the art. Newbury Park, CA: Sage Publications; 1993.
28. McCroskey, JC. An introduction to rhetorical communication: A western rhetorical perspective. Boston: Pearson Education, Inc; 2006.
29. Strauss, ALCJ. Basics of Qualitative Research: Grounded Theory, Procedure and Techniques. Beverly Hills, CA: Sage Publications; 1990.
30. Gilchrist, VJ.; Williams, RL. Key informant interviews. In: Crabtree, BF.; Miller, WL., editors. *Doing Qualitative Research.* Newbury Park, CA: Sage Publications; 1999. p. 81



31. McCroskey JC. Measuring communication apprehension. *J Communication*. 1978; 28:104–111.
32. Ayres J, Colby-Rotell N, Wadleigh PM, Hopf T. Measuring patients' communication apprehension about interviewing with physicians: Instrument development. *Communication Research Reports*. 1996; 13:86–93.
33. Booth-Butterfield S, Chory R, Beynon W. Communication apprehension and health communication and behaviors. *Communication Quarterly*. 1997; 45:235–250.
34. Richmond VP, Smith RS, Heisel AM, McCroskey JC. The impact of communication apprehension and fear of talking with a physician on perceived medical outcomes. *Communication Research Reports*. 1998:344–353.
35. McCroskey, JC.; Richmond, VP.; McCroskey, LL. Willingness to communicate, communication apprehension, and self-perceived communication competence: Conceptualizations and perspectives. In: Daly, JA.; McCroskey, JC.; Ayres, J.; Hopf, T.; Ayers-Sonandre, DM.; Wongprasert, TK., editors. *Avoiding communication: Shyness, reticence, and communication apprehension*. 3. Cresskill, NJ: Hampton Press; 2009. p. 97-128.
36. Berger BA, Richmond VP, McCroskey JC, Baldwin HJ. Reducing communication apprehension: Is there a better way? *Am J Pharm Educ*. 1984; 48(Spring):46–50.
37. Ajzen I. The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*. 1991; 50:179–211.

## Appendix. Questions Comprising the Semi-Structured Interview Guide

### Communication Behavior Instrument Questions

- What other behaviors do you engage in related to prescription drug abuse that are not included in the questionnaire?
- What factors do you consider when deciding whether or not to engage in the behaviors included in the questionnaire?
- What factors do you consider when determining the legitimacy of a patient's need for drugs with abuse/addiction potential?
- What is the typical plan of action when you encounter a patient you perceive to be abusing prescription drugs?
- What is the typical plan of action when you encounter a patient you perceive to be addicted to prescription drugs?
- What concluding thoughts do you have about we can best capture prescription drug abuse communication behaviors in this short questionnaire?

### Self-Perceived Communication Competence Instrument Questions

- How would you describe your confidence in your ability to speak with your patients about prescription drug abuse concerns?
  - What types of situations make you feel confident?
  - What types of situations make you feel unconfident?
- If we desire to transform this short questionnaire into a survey that measures your confidence specific to prescription drug abuse communication, what factors do we need to consider?

## Personal Report of Communication Apprehension – PRCA 24 Instrument Questions

- Almost all, if not all of us, have some situations in which we feel anxious or apprehensive when talking to one or more people. With which type of audience would you say your apprehension is the highest? In what context would you say your apprehension is the highest?
- If we desire to transform this short questionnaire into a survey that measures your apprehension specific to prescription drug abuse communication, what factors do we need to consider?

## Willingness to Communicate Scale Questions

- Now consider this instrument specific to prescription drug abuse communication. Describe factors that influence whether or not you choose to engage in communication with your patients.
- Think of a time when you probably should have engaged a patient in a conversation about prescription drug abuse or an addiction, but chose not to do so
  - Describe the situation
  - What factors played a role in your decision not to communicate with this patient?
- If we desire to transform this short questionnaire into a survey that measures your willingness to communicate specific to prescription drug abuse communication, what additional factors do we need to consider?

## Concluding Questions

- What types of prescription drug abuse information do you have available for patients in your practice setting?
- What resource(s) do you think would positively influence the extent to which you engage in PDA/M communication with your patients?
  - Reimbursement?
  - Training?
  - Time?

**ARTICLE SYNOPSIS**

This manuscript describes a qualitative study of primary care prescribers and community pharmacists that explores prescription drug abuse-related communication with patients. Two major themes and multiple sub-themes emerged, including employment of individual and practice specific policies and conversations, practice setting barriers, and fear of patient response. Despite the perceived importance of engaging in prescription drug abuse communication, providers reported that prescription drug abuse communication is uncomfortable, variable, multifactorial, and often avoided. Emerging themes inform development of interventions that can improve engagement of prescribers and pharmacists in prescription drug abuse prevention and treatment.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

### Highlights

- Communication is inherent in prescription drug abuse (PDA) prevention and treatment
- Provider communication behaviors are variable specific to PDA
- PDA communication is uncomfortable, multifactorial, and often avoided

**Table 1**

Focus Group Participant Demographic Characteristics (N=35).

Variable	Category	Number (%)
Age	31–40	12 (34)
	41–50	9 (26)
	51+	14 (40)
Gender	Female	17 (49)
	Male	18 (51)
Profession	Administrator	1(3)
	Nurse Practitioner	5 (14)
	Pharmacist	16 (46)
	Physician	13 (37)

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

**Table 2**

Prescription Drug Abuse-Related Communicative Behaviors and Perceived Importance of Behavioral Engagement.

<b>Behavior<sup>a</sup></b>	<b>Mean (SD)</b>	<b>Range</b>	<b>Median Importance Rating<sup>b</sup></b>
Discuss abuse potential of prescribed medications	6.6 (2.0)	4–10	3
Discuss appropriate storage of drugs with abuse potential	4.7 (2.9)	0–10	3
Explore personal histories of drug abuse	5.7 (3.4)	0–10	3
Conduct a drug abuse risk assessment or screening	5.1 (3.7)	0–10	3
Verbally refer a patient for drug abuse treatment	3.5 (3.7)	0–10	3
Discuss the results of a prescription drug monitoring program query	7.3 (2.9)	0–10	3
Discuss your concern with a patient regarding his/her drug-taking behaviors	6.7 (2.7)	2–10	3
Discuss your concern with a prescriber regarding his/her prescribing behaviors	3.0 (2.6)	0–10	3
Discuss your concern with a pharmacist regarding his/her dispensing behaviors	3.0 (3.0)	0–8	3

<sup>a</sup>On a scale from 0 to 10, please estimate the frequency with which you engage in prescription drug abuse conversations with your patients or health care professionals when the opportunity presents;

<sup>b</sup>On a scale of 1 to 3, how important do you feel it is to engage in conversations with your patients or health care professionals regarding each of the aforementioned items

**Table 3**

Personal Report of Communication Apprehension-24, Self-Perceived Communication Competence, and Willingness to Communicate Scores.

Construct	Mean (SD)	Range	Possible Score Range
PRCA-24-Group	14.9 (6.4)	6–26	6–30
PRCA-24-Meetings	14.6 (6.3)	6–27	6–30
PRCA-24-Interpersonal	14.4 (5.4)	6–27	6–30
PRCA-24-Public Speaking	17.5 (7.0)	6–30	6–30
<b>PRCA-24-Total</b>	<b>61.4 (22.8)</b>	<b>24–97</b>	<b>24–120</b>
SPCC-Acquaintance	83.9 (16.2)	45–100	0–100
SPCC-Dyad	92.0 (9.4)	67–100	0–100
SPCC-Friend	85.2 (14.8)	40–100	0–100
SPCC-Group	84.7 (17.2)	27–100	0–100
SPCC-Meeting	75.8 (23.6)	20–100	0–100
SPCC-Public Speaking	77.2 (23.1)	23–100	0–100
SPCC-Stranger	74.8 (24.3)	20–100	0–100
<b>SPCC-Total</b>	<b>81.3 (18.0)</b>	<b>35–100</b>	<b>0–100</b>
WTC-Acquaintance	71.1 (19.9)	35–100	0–100
WTC-Friend	79.7 (12.2)	60–100	0–100
WTC-Group	70.6 (14.8)	45–100	0–100
WTC-Interpersonal	73.7 (17.3)	40–100	0–100
WTC-Meeting	62.1 (22.1)	30–100	0–100
WTC-Public Speaking	59.7(19.7)	22–100	0–100
WTC-Stranger	48.8 (22.0)	14–94	0–100
<b>WTC-Total</b>	<b>66.5 (15.7)</b>	<b>39–98</b>	<b>0–100</b>

PRCA-24: Personal Report of Communication Apprehension; SPCC: Self-Perceived Communication Competence Questionnaire; WTC: Willingness to Communicate Scale

**Table 4**

Emerging Themes as Determinants of Prescription Drug Abuse Communication.

---

**Influencers of HCP Communication and Prescribing/Dispensing Behaviors**

- Subjective vs. objective patient information
- Practice setting barriers
- Patient relationships
- Level of HCP training and experience
- Pharmacists' lack of patient information
- Fear of patient responses
- Individual and practice setting policies.

**Communicative Approaches and Behaviors**

- Standard operating conversations
- Consequential communication
- Communication avoidance

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript