



A CONVERSATION ANALYTIC INVESTIGATION ON EXPERTISE DEMONSTRATION IN COMMUNITY PHARMACY INTERACTION

TOPLUM ECZANESİNDEKİ ETKİLEŞİMDE KONUŞMA ÇÖZÜMLEMESİ YÖNTEMİ İLE UZMANLIK BİLGİSİ GÖSTERİMİ

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ABSTRACT

Objective: In recent years, there have been increasing numbers of the studies based on pharmacist communication skills in community pharmacy. However, different expertise knowledge provision within community pharmacy interaction is an under-researched area. This article aims to investigate how the expertise demonstration is deployed in a community pharmacy interaction.

Material and Method: 30-hour audio and video recordings were collected in a community pharmacy in Türkiye, and analysed through data-driven and bottom-up research perspective of Conversation Analysis.

Result and Discussion: The findings of the study show that the pharmacist displayed his expertise knowledge within three different sequential organizations initiated by the patient, pharmacy staff and pharmacist through a wide range of interactional practices such as providing extended explanations and advices, referring to external authority, and using both professional and trade knowledge. This micro-analytic study in pharmacy interaction makes an important contribution to pharmacy services and education.

Keywords: Conversation analysis, display of expertise knowledge, pharmacy interaction

ÖZ

Amaç: Son yıllarda, toplum eczacılığında eczacıların iletişim becerilerini temel alan çalışmaların sayısı giderek artmaktadır. Ancak, toplum eczanesindeki etkileşimde farklı uzmanlık bilgisi sağlama uygulamaları yeterince araştırılmamış bir alandır. Bu makale, bir toplum eczanesindeki etkileşimde uzmanlık gösteriminin nasıl kullanıldığını araştırmayı amaçlamaktadır.

Gereç ve Yöntem: Türkiye'deki bir eczanede 30 saatlik ses ve video kayıtları toplanmış ve Konuşma Çözümlemesi'nin veri güdümlü ve tabandan yukarı işlemlemeye dayalı araştırma bakış açısı ile analiz edilmiştir.

Sonuç ve Tartışma: Çalışmanın bulguları, eczacının uzmanlık bilgisini hasta, eczane personeli ve eczacı tarafından başlatılan üç farklı sıralı organizasyon içinde, genişletilmiş açıklamalar ve tavsiyeler sunma, dış otoriteye atıfta bulunma ve hem mesleki hem de ticari bilgiyi kullanma gibi çok çeşitli etkileşimsel uygulamalar yoluyla sergilediğini göstermektedir. Eczane etkileşimi üzerine yapılan bu mikro-analitik çalışma, eczacılık hizmetleri ve eğitimine önemli bir katkı sağlamaktadır.

Anahtar Kelimeler: Eczane etkileşimi, konuşma çözümlemesi, uzmanlık bilgisinin gösterimi

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INTRODUCTION

Communication in Pharmacy

The communication role, which is one of the nine-star pharmacist concepts, has a very important place in the communication of pharmacists with patients and other healthcare professionals [1]. It is known that using effective communication skills can improve patient care outcomes, achieve the desired patient satisfaction, and improve the results of medication and treatment [2,3]. In this sense, effective, motivating, and targeted communication is one of the most important tools in medicine counselling to reach institutional goals [4].

In the interactive field of counselling, Heritage and Sefi's study of health visitor interactions with new mothers may be the first document to identify and define the context of counseling and counselling practices. In this study, counseling is identified as "describing, recommending, or otherwise informing a health visitor about a preferred course of action" [5]. "Effective counseling" on the zone of the pharmacist involves effective knowledge and know-how relationships, counseling process and content. First of all, the pharmacist needs to have "current knowledge of pharmacotherapy" as well as the capability to "give effective and accurate patient education and counseling" [6]. The purpose of the consultation is to provide patients with the tools to use all medicines more safely and effectively. This can improve the perception of pharmacists as the "first point of contact" for medicines and health recommendations [7]. Pharmacists' expertise plays a crucial role in the patients' decision-making and pharmacy interaction [8]. In addition, expertise is not easily observed, but analysts need to learn about the relationship between participants' actions and "responsible expertise" in a given field, or how recipients perceive actions as expertise. In this sense, 'becoming an expert' and 'demonstrating expert knowledge' are interactive presentations for task accomplishment in pharmacy interaction [9].

Conversation Analysis in Pharmacy Interaction

Conversation Analysis (CA) is performed as a persuasive system of discipline and inquiry to obtain precise details in social interaction and to analyse what the actors of social interaction do and what they achieve in talk-in-interaction [10]. The existing CA literature on the professionals' practices shows how they transfer general knowledge in a contextual manner with various discursive functions. For example, physicians can initiate questions and interruptions to align a patient's personal plan with the facility's plan [11] and may strategically use invitations to present perspective to perform advanced diagnostics in a non-confrontational manner [12] while healthcare seekers may raise issues to provide context for giving advice [5]. Over the past decade, there has been increasing number of the studies focusing on how practitioners and patients/clients construct their expertise through dialogue [13-16]. In these studies, the pharmacists are regarded as information providers and experts while the patients are seen as information receivers and laypeople as well as other interactional features including action sequencing, turn-taking and content administration. In addition, the interactants (i.e., pharmacists and patients) continuously position the pharmacist as an expert and the patients as a layperson through different sequential actions in patient consulting conversations, including medicine information, access to medicine names, counseling, asking questions, and showing current directions [6].

Knowledge Construction

Knowledge is a collective category that includes expert knowledge, specialized news, and private information, as well as interactive aspects of understanding, perception, awareness, cognition, evaluation, and experience [17]. While institutional collaboration is inherently asymmetric because professionals have expertise and experience about the problems around which the service is focused, the provision of recommendations is an activity in which these asymmetries are most apparent [18]. Participants display and/or claim knowledge while initiating sequences or orienting to co-participants' turns, thus co-construct knowledge in a dynamic and context-sensitive way, which is known as epistemics in interactional research [19].

In counselling sessions, there is always an epistemic asymmetry between the participants [20], and they dynamically position themselves and each other on an epistemic gradient according to their state of being less to more knowledgeable or vice versa [19]. Stivers et al. identified three main

dimensions of knowledge asymmetry; 1) epistemic access (ranging from unknowing (K-) to knowing (K+); the degree of certainty with which a speaker displays an unknowing or knowing position varies dependent on the interactional context [19], 2) epistemic advantage, and 3) epistemic responsibility. The first dimension represents the source of knowledge and relates to practices for direct access to it, the second dimension refers to participants' relative right to know, and the third dimension relates to the duty to know. All these aspects play significant roles in accomplishments of the institutional situations. Although differences in participants' knowledge are ubiquitous and inevitable in any human relationship, they are particularly evident in institutional settings. Because participants are involved in institutional cooperation within the framework of their institutional roles, structuring them as 'experts' and 'owners' of particular knowledge areas and assigning them different epistemological positions, i.e., socially-based positions of epistemological authority [21,22].

There are very few studies that have investigated the community pharmacy interaction and how the pharmacist demonstrates her/his expertise in talk-in-interaction [16]. The community pharmacy interaction including information and medicine presentations of pharmacists who do not receive any consultancy fee has not been closely examined in the existing literature. Against this background, the current study aims to show how the pharmacist displays his expertise knowledge using diverse interactional practices within community pharmacy interaction initiated by the patient, pharmacy staff, and pharmacist.

MATERIAL AND METHOD

Data and Research Context

The data of the study come from the face-to-face interaction between a pharmacist, two pharmacy staffs, and patients in a community pharmacy in Ankara, Türkiye. The whole database includes 30-hour recordings collected with two cameras and two audio recording devices. Before the data collection procedure, ethical approval was received from the official ethical board. In order to receive the patients' consents, an explanatory notice about the data collection was hung on the door of the focal pharmacy. Before the patients entered the pharmacy, the researcher also asked for their permission. In total, 300 patients were involved and all of them accepted to participate in the study. Also, the pseudonyms were used to secure the participants' identities while representing the extracts in the results section.

Conversation Analysis

This study adopts Conversation Analysis (CA) as the research methodology to show the micro-analytic details of naturally occurring pharmacy interaction. CA is identified as 'a set of methods and approach that describes, analyses and aims to understand conversation as the basis of people's social life in social sciences' [23]. Through this methodology, researcher(s) record, transcribe, and analyse "naturally occurring" conversations of the type of interaction of interest [24]. At the beginning phase of the data analysis, the recordings of the pharmacy interaction were watched over and over through unmotivated looking [25]. Then, both audio and video recordings were transcribed using Jefferson Transcription System [26] (Table 1) transcription conventions to grasp all the interactional details including verbal utterances and embodied actions. Moreover, line-by-line analysis of interactional sequences was based on the scrutiny of interactional features of CA including turn-taking, preference organization, and repair. Following the CA-based data analysis procedure, we built a collection of expertise knowledge demonstration of the pharmacist as the main phenomenon of this study. We explored that the pharmacist showed his expertise following the patient-, the pharmacy staff- or his own initiated sequences in three different subcollections. Thus, the broader collection consists of 80 extracts including 30 pharmacist-initiated, 7 pharmacy staff-initiated, and 43 patient-initiated sequences through diverse interactional practices providing extended explanations and advice, referring to external authority, and using both professional and trade knowledge within pharmacy interaction. The average length of a consultation was around 4 minutes, but can range from 3 to 10 minutes. In this paper, three representative extracts will be closely examined to demonstrate the displays of pharmacist's expertise knowledge with different interactional practices.

Table 1. Jeffersonian Transcription Conventions

Symbol	Description
(.)	A micropause- a pasue of no significant length.
(0.7)	A timed pause- long enough to indicate a time
[]	Square brackets show where speech overlaps.
> <	Arrows showing that the pace of speech has quickened.
< >	Arrows showing that the pace of speech has slowed down.
()	Unclear section
(())	An entry requiring comment but without a symbol to explain it.
<u>Underlining</u>	Denotes a rise in volume or emphasis.
↑	Rise in intonation
↓	Drop in intonation
→	Entered by the analyst to Show a sentence of a particular interest. Not usually added by the transcriber.
CAPITALS	Louder or shouted words
(h)	Laughter in the conversation/speech.
=	Will be at the end of one sentence and the start of the next. It indicates that there was no pause between them.
:::	Colons-indicate a stretched sound

RESULT AND DISCUSSION

In this section, three long representative extracts will be represented as (1) patient (Pt)-, (2) pharmacy staff (Ps)-, and (3) pharmacist (P)-initiated sequences. Firstly, Figure 1 (Extract 1-Solkasen) illustrates how the pharmacist displays his expert knowledge including both professional and trade knowledge about the alternative medicines and companies through different interactional practices within patient-initiated pharmacy interaction.

In line 1, the patient (Pt) initiates a Yes/No question [27] about if there is a particular medicine (solkasen patch- diclofenac sodium) or not, and the pharmacist provides a dispreferred response thereby sharing a trade knowledge about medicine production as the first attempt of expertise knowledge demonstration [28], and using ‘we’ as an institutional pronoun of pharmacy staff [29]. Following Pt’s verbal dissatisfaction (don’t do it), P announces another alternative medicine (kuromet-ibuprofen), mitigates his suggestion through the silences (0.6, 1.0) and using ‘can’ structure from line 6 to 10. Then, Pt explains her health problem, and provides account for her previous request for solkasen patch, and she extends the interaction through clarification questions about solkasen patch (lines 11, 12). This signals that Pt needs more information about the demanded medicine [7] although the pharmacist suggests another alternative medicine. Then, the pharmacist starts his extended explanation turn (e.g., [30] with “honestly”, and displays his epistemic knowledge based on trade knowledge in pharmacy field with references to different possibilities and particular company names [19] (lines 13-15). This extended display of his expertise knowledge leads to Pt’s demonstration of understanding and acceptance. After 0.5 sec of silence, the pharmacist orients to the pain stand to show alternative medicines, and P elaborates various types of medicines with detailed explanation and exemplification. Such detailed explanations based on P’s higher epistemic knowledge and authority [10] is followed by Pt’s lack of knowledge [31] and experience about different medicines for pain (i have never used, i never know). Then, the pharmacist upgrades his expertise demonstrations with references to the Ministry of Health which is an external source of authority [32] and recommends the same alternative medicine (kuromet). However, unlike the previous mitigated recommendation in line 8, he highlights “kuromet” as the most similar one to the demanded medicine. Thus, P’s increasing demonstrations of his expertise knowledge result in the patient’s overlapped repetition. After P’s detailed knowledge provision about the company producing his suggested medicine, the patient requests

01	Pt:	solkasen peç var 'mıydı'?	
		is there a solkassen patch	
02	-> P:	sol[kasenler gelmiyo ya: biz de [çok arıyoruz da	
		solkasens aren't brought, we are looking for them too	
03	Ps2:	[artık üretilmiyo:	
		they are no longer produced	
04	Pt:		[ay: yap- hu:h don't
05		-mayın [ya:=	
		do it	
06	-> P:	[kuromet var	
		there is kuromet	
07		(0.6)	
08		ı: yani tam: (0.4) işlevini görmez ama:	
		e:r well, it does not function as solkassen patch but	
09		(1.0)	
10		şey yapabilir=	
		it can do something	
		#touches on her right shoulder	
11	-> Pt:	=çok fena #buram tutuldu ve solkassen çok güzel yani o ko-	
		very bad this became stiff and solkassen is very good so	
		#P stands up	
12	->	#koyarsınız onu: "işte<° kalktı mı piyasadan, no:ldu?	
		you put that well was it pulled from the market, what happened?	
		#passes to the front of the counter	
13	-> P:	#valla biz de arıyoruz (.) uzun zamandır depolarda yok ya	
		honestly, we are looking too (.) it hasn't been in warehouses	
		for a long time	
14		zam alıp tekrar gelecek ya da firma el değiştiriyö yani bi-	
		it will come again with a raise or the company is changing owner so	
15	->	kovartis meseka ortaklığından dolayı bi (.) kutu değişimi olabilir	
		there may be a box change due to the partnership of kovartis and meseka	
16	-> Pt:	anladım	
		i see	
17		(0.5)	
		#points to a stand with his left hand	
18	P:	#şimdi bizim ağrı köğemiz burası	
		now here is our pain stand	
19	Pt:	hı hı:	
		huh huh	
20		(0.7) ((Pt approaches the stand))	
		1# (lines 21-26)P	
		points to the	
		medicines on the stand	
21	-> P:	>yani< piyasada olan hemen hemen hepsi var l#bu bildiğimiz	
		well there are almost all of them on the market, this is the classic	
22		(0.6) klasik yakı e:r likit hali (.) <Panlı yakınan sıvası>	
		plaster that we know err its liiquid state <the liquid of the Panlı	
		plaster>	
23	->	>mesela< şu merhemler mentol[lü	
		for example those ointments are with menthol	
24	-> Pt:	[ben hi:ç kullanmadım vallahi, hiç	
		i have never used i	
25	->	bil[miyorum	
		never know	
26	P:	[bunlar mesela sağlık bakanlığı onaylı hepsi#1 (0.3) ama	
		for example, these are all approved by the ministry of health but	
		#points to the kuromet	
27		#kuro:meti tavsiye ederim yani şu an solkassen pet yerine en	
		i recommend kuromet, so now it's the one that can be the most	
28		muadil [olabilecek	
		equivalent plaster to solkassen patch	
29	Pt:	[en yakın o:	
		the closest one	
30	-> P:	aynen bu da(.) çok güvenilir bi firmanın vurofenle aynı firmadır	
		exactly this is from a very reliable company too, from the same company	
		with vurofen	
		#touches on the right shoulder	
31	Pt:	hı: şu #boyun bölgesi [küçük dii:l de	
		well, that neck area, it's not small	
		2# (lines 32-35) P points to	
		his right shoulder and	
		moves his hands	
32	-> P:	[bi tane 2#yapıştırtın ısıtıyo o bu bölgeyi	
		paste one, it makes this area warm	
33		[çok] rahatlama sağlıyo böyle bi [relaksasyon sağlıyo:	
		it provides a lot of relief it provides such a relaxation	
		#nods her head	
		#nods her head	
34	Pt:	[#hı:]	[#hı::h
		hu:h	hu::h
35	P:	hem ağ<rınızı:> dindiriyö hem de böyle bi:[vardır ya#2	
		it not only relieves the pain, but it also-	
36	-> Pt:		[kitlenmiş gibiyim
			i feel like i'm locked
37		yani [hani şimdi	
		well now	
		#nods his head	#turns his head
38	-> P:	[#aynen ha onu diyecaktım tam #böyle kafanızı	
		exactly huh i was going to say that, when you change	
39	->	değiştirdiğinizde bi tarafa ağrıyodur, onu alıyo:	
		your head one side gets pain, it eliminates that pain	
		#raises his eyebrows	
40	->	>ama mesela< #siyatikse (.) boyun fitiğaysa:	
		but for example, if it is sciatica (.) cervical disc hernia	
		#lifts her head	
41	Pt:	#değil	
		no	
42	-> P:	sadece kısmi rahatlama sağlıyo bu-	
		it only provides a partial relief	
43	-> Pt:	değil sardunyalari dikerken oldu	
		no, it happened while planting geraniums	
44	-> P:	ham: Ebu olur bu keser sizif	
		hnm it's good for your pain	
		#nods her head	
45	Pt:	#tamamdır o zaman ufak şeyden alıyım	
		ok then i will buy the little thing	

Figure 1. Extract 1-Solkasen

another mitigated clarification thereby stating that the pain area (her neck) isn't small and touching her neck (line 31). From line 32 to 35, P explains how to conduct the medicine and get the solution for her pain while Pt displays her listenership [33]. Also, Pt extends her previous request for clarification with reference to her pain (*i feel like i'm locked*). Following this, the pharmacist not only introduces how the medicine influences on her pain, but also exemplifies her pain using a medical terminology (*sciatica*) and a specific instance for *sciatica* with a formulated medical expression (*cervical disc hernia*). Therefore, the pharmacist demonstrates his expertise knowledge through medical terminology as well as his information-sharing on the effect of the medicine [34]. Finally, after Pt's medical history sharing (line 43), and P's explicit advice about the medicine (line 44), this extract closes with Pt's confirmation with "okay" [35] and request for buying the small package of the suggested medicine (*kuromet*).

In brief, Extract 1 shows the dynamic knowledge asymmetry of the patient-initiated pharmacy interaction through the pharmacist's displays of his expertise knowledge. In doing so, after the patient requests for detailed information about the production of her demanded medicine (*solkasen*) and the impact of the suggested medicine (*kuromet*), the pharmacist shares his professional knowledge (usage of the medicine, impact of the medicine, etc.) and trade knowledge (medicine production, companies) through different practices such as using medical terminology and formulated instance, referring to the external epistemic authority (i.e., Ministry of Health). Thus, it can be clearly seen that various displays of the pharmacist's expertise knowledge enable the patient to persuade for buying the medicine existing in the pharmacy.

Figure 2 (Extract 2-Pastille) represents how the pharmacist responds another patient's question through diversified expertise knowledge demonstration practices within a pharmacy staff-initiated sequence. The following extract comes from moment during which one of the pharmacy staff (Ps1) inputs a patient's prescription data on the system and prepares the patient's medicine while the patient asks a question about the possible damage of the prescribed medicine to her body.

At the beginning of the extract, when the pharmacy staff shows a pastille from the medicine corner, the patient asks a Y/N question about if she can use pastille while breastfeeding (lines 1-3). After Ps1's request for confirmation about whether she is breastfeeding (line 4), Pt's confirmation (*huh huh*) (line 5), and P's announcement that he is leaving the pharmacy (line 6), the pharmacy staff orients to the pharmacist by uttering his name (line 8), and then asks the patient's question about the medicine usage thereby announcing the the name of the pastille to elicit the pharmacist's expert knowledge [36]. In line 10, the pharmacist shows the medicine to the Pt and displays her expertise through his account provision (*sugar free*) [37]. The pharmacy staff also confirms P's explanation with reference to the written explanation on the medicine, which leads the Pt's change of state token (*huh*) [38] and acknowledgement token (*ok*). This signals that the pharmacist's expertise knowledge through account provision and the Ps1's written evidence to this knowledge result in epistemic change on the patient's knowledgeability. After they talk about off-task topic (see omitted part-lines 13-19), Pt initiates another Yes/No question by displaying her epistemic knowledge [39] using medical terminology (*beta glucans*), and then the pharmacist requests for a clarification about the age of Pt's baby. After Pt states that her baby is one year old, the pharmacist deploys his expertise knowledge using societal expressions (*milk is for pleasure*), and expresses that Pt can give the medicine to her baby. He also elaborates giving beta glucan to 1-year old babies using "we" referring to the pharmacy staff and/or pharmacists [29]. This extended demonstration of his expertise knowledge leads to Pt's interrogation about the reasons why this medicine isn't given to them. Then, P downgrades the certainty of knowledge about using the beta glucan on babies through "can" (*it can be given*), introduces that they won't have any problems as an expert in a community pharmacy interaction (lines 31, 32), and repeats his previous recommendation about the medicine usage (line 33) in an overlapped way with Pt's display of understanding (line 32). Ultimately, this extract closes with thanking sequences of both the pharmacist and the patient.

01 -> Pt: 1# (lines 1-3) Pt looks at the medicine stand on the counter
 1#bi şey sorcam (.) ben emziriyorum da bu: 1: ↑şey
i will ask something i am breastfeeding but this is er: ↑well
 (0.7)

02 #takes a pastille from the medicine stand

03 -> şunu:n#1 #falan bi zararı olmaz di mi?
this doesn't give harm, does this?

04 -> Ps1: emziriyomu musunuz?
are you breastfeeding?

05 -> Pt: huh hu:h
 #walks towards the door

06 -> P: #gençler ben edayı bırakıp geliyorum=
i'm leaving eda and coming back

07 Ps1: =fatih abi (.)
dear fatih

08 -> P: ↑ha:
hu:h

09 -> Ps1: 1: emziren anne pastil #kullanabilir mi ktreyasil?
er: can a breastfeeding mother use pastille (.) ktreyasil
 2# (lines 10-14) P walks back to the medicine shelf,
 takes the medicine and gives it to Pt

10 -> P: şükersiz (0.3) 2#şunu:
sugar free (0.3) that

11 -> (0.5)

12 Ps1: hı hı: (.) orda şükersiz °yazıyo:°
huh hu:h 'sugar free' is written there

13 Pt: ha: (0.3) tamam
hu:h ok
 ((6 lines were omitted.)) ((Ps1 and P talks about P's
 daughter's jersey.))

#P turns back
 to Pt #Pt shows her hand

20 -> Pt: 1: beta glu#kanlar #falan zararlı (.) olur mu acaba:?
e:r would beta glucans be harmful? I wonder

21 P: ↑kaç aylık
how old is the baby?

22 Pt: bir yaşında (0.4) [on üç aylık
he is one thirteen-month

#shakes his head

24 P: bir [yaşındaysa keyif sütü (.) #bi şey olmaz
if he is one, milk is for pleasure (.) nothing happens

25 (0.6)

26 [rahat rahat verebilirsin alabilirsiniz=
you can give it comfortably you can take

27 -> Pt: [tamam
okay

28 P: çocuğa da başlıyoruz çünkü (.) beta glukana bir yaşından sonra
because we also give beta glucan to kids after one year old

29 Pt: hım: [daha başlamadı(lar bize ama)
hmm but they haven't given it to us yet

30 -> P: [sıkıntı ol-
no proble-

31 -> ya: başlanabiliyo (.)
well it can be given

32 -> Pt: anladım
i see

33 -> P: [öyle söyleyim siz içebilirsiniz hiç bi sakıncası olmaz
let me say that, you can take it, you wouldn't mind

34 Pt: anladım teşekkür ederim
i see thank you

#walks towards the door

35 P: rica ederi#:m (.) geçmiş olsun
you're welcome get well soon

Figure 2. Extract 2-Pastille

In sum, Extract 2 highlights that the pharmacist responds to the patient's question initiated to the pharmacy staff about the medicine usage through various demonstrations of his expertise knowledge (using medical terminology and societal expression, providing extended accounts to Pt's clarification requests). Therefore, he utilizes his own expertise knowledge to make Pt's epistemic status change from less to more knowledgeable.

In a similar way, Figure 3 (Extract 3-Blood pressure) illustrates how the pharmacist provides his expert knowledge while eliciting the patient's history-taking within the pharmacist-initiated interaction. Before Extract 3 starts, the pharmacist has found the prescribed medicines for the patient from the medicine tracking system.

From line 1 to 3, the pharmacist refers to being prescribed a blood pressure medicine, explains the usage of this medicine, and requests for confirmation (*is it ok*) while the patient initiates a Y/N question about when to take the medicine in an overlapped way. After P's repetition of previous

explanation (take it in the morning), Pt initiates a request for confirmation on her own medicine taking routine (taking in the evening) (line 6). Then, P firstly mentions that she can also take it in the evening regarding her routine, waits for 1.1 seconds of silence, and asks alternative questions to receive more information about the history-taking process of the medicine prescription. After Pt's confirmation of the second alternative with the repetition (they raised the dose), and P's minimal acknowledgement, the pharmacist completes the medicine scanning procedure (line 13). In line 14, P displays his expert knowledge by repeating his previous recommendation about taking the medicine in the morning with reference to the effectiveness of the medicine in a mitigated way (maybe), and requests for confirmation. Pt displays her alignment with P's suggestion, and shares her friend's explanation about taking the medicine in the evenings, and completes her turn with a laughter which can show her orientation to the problem [40]. The pharmacist initially rejects unprofessional information about the medicine usage, and demonstrates his expertise knowledge thereby explaining when Pt can get the most benefit from the medicine, and how the time of taking medicine has a crucial influence on rising blood pressure through exemplification and evidence-based account. Finally, after Pt's display of her listenership, the pharmacist completes his expertise knowledge-sharing sequence with references to the changing impact of the medicine in a day. Overall, Extract 3 illustrates that the pharmacist produces his expertise knowledge through rejection of unprofessional knowledge, and detailed account provision on the potential results of using the medicine in the morning or evening within the pharmacist-initiated sequence when he realizes the problem about the preferred time for taking the medicine during the history-taking sequence, and provides advice about its preferred usage.

This study showed the displays of the pharmacist's expertise knowledge within three different sequential structures: the patient-, pharmacy staff-, and pharmacist-initiation. Using Conversation Analysis allows for participant-relevant explanations of the diversified practices of the pharmacist's expertise knowledge demonstration in community pharmacy interaction.

In this study, we also documented the epistemic asymmetry between the pharmacist, patients, and pharmacy staff. The interactants negotiate the prescribed expert identity to the pharmacist for the purposes of the expertise transfer as an interactive performance [9,13,14]. On the other hand, the patients were regarded as the non-expert because of their non-access to the professional knowledge. In addition, as demonstrated in the findings (see Extract 2), the pharmacy staff directed the patient's request for information based on the medical knowledge to the pharmacist for the expertise knowledge [10]. Thus, this study indicated that the epistemic asymmetry in the community pharmacy interaction only gives the permission for the pharmacy staff to sell the products, but not providing medical knowledge to the patients.

In this study, we highlighted that the patients initiate Yes/No type questions [27] to request for confirmation and/or clarification through their own demonstrations of knowledge [19]. Therefore, they attempted to manage their epistemic search sequences with the help of the pharmacist as an expert [6]. However, when the pharmacist initiated dispreferred and/or unexpected responses (e.g., suggesting a different medicine in Extract 1) [41-43], the patients requested for more elaboration through their own account provisions (e.g., sharing pain history). As opposed to the non-expert's "recipe" knowledge [44], the pharmacist provided evidence-based accounts using professional and trade knowledge as well as the reference to the epistemic authorities. In addition, the patients frequently expressed their "lack of information" or "doubts" on various medical issues, which indicated what the patient wanted to know or on what subjects they needed an expert opinion [45]. In this study, we explored that the patients also shared their problematic practices with references to other parties' viewpoints with a smiley voice [46] and laughter [40] (see Extract 3). Thus, they displayed their awareness about their doubts and medical problems in talk-in-interaction.

The micro-analytic findings of this study also explored that these various patient practices provided some interactional spaces for the pharmacist to share their expertise knowledge [16] using different practices to respond the patients' questions, and complete the tasks of community pharmacy interaction (e.g., selling the drugs, providing necessary information). As the expert having more professional knowledge, the pharmacist not only produced medical terminology and field-related instances but also referred to the Ministry of Health as an epistemic authority [47]. In line with the

previous literature ([48,49], the pharmacist also provided detailed explanations to avoid the patients' lack of understanding based on the technical medical knowledge.

```

#moves the medicine closer to the MTS (Medicine
Tracking System) reader and scans it
01 -> P: size bi tane tansiyon #ilacı başlamışlar
they started to give you one blood pressure medicine
02 (1.0) ((P puts the medicine on the table))
1# (lines 03-13) ((P looks at the screen and logs into Pt's information
on the medula system))
03 -> 1#her gün sabah bi tane tok karnına alacaksınız (.) [oldu mu?
you take one on a full stomach every morning (.) is it ok?
04 -> Pt: [sabah mı alıyım?
do i take it in the morning?

#nods his head
05 -> P: #sabah alın
take it in the morning
06 -> Pt: ben akşam alıyodum ama:(.) ters mi alıyodum?
i took it in the evening but was it wrong?
07 P: akşam alıyosanız rutininizi bozmayın
if you are taking in the evening do not break your routine
08 (1.1)
09 yeni ↑mi başladılar bunu:?[dozu mu yükselttiler?
have the doctors just started this? did they raise the dose?
10 Pt: [yo:k
no
11 dozu yükselttiler:
they raised the dose
12 -> P: °hım°
hnm
13 -> (1.9)#1
2# (lines 14-28) ((P takes a nylon bag and puts the medicine into it))
14 -> 2#belki etki etmiyo olabilir (.)sabah alın siz bundan sonra olur mu:?
maybe it can not be effective, take it in the morning from now on,
is it ok?
15 -> Pt: olur çünkü: (0.4) yatarken ° bi faydası olmaz diyodu° başka bi
okay because (0.4) another sick friend said that it is
16 -> fhasta arkadaş hehehf
ineffective while going to sleep
17 -> P: yok yatarken bi fayda olmamasından ziya:de#2 (.) normalde
no, rather than there is no benefit while going to sleep (.) normally
18 gün içinde tansiyonunuzun düşük olması daha iyi :
it is better to have a low blood pressure during the day
19 3# (lines 19-28) ((P completes to log into Pt's information on the system))
3#°şimdi° ↑bunların yarılanma ömrü ortalama on iki saat
now their elimination phase take twelve hours on average
20 e siz şimdi uykudayken tansiyonunuzu düşürüyo[sunu:z ]
so now you're lowering your blood pressure while you're asleep
21 -> Pt: [°e:vet°]
yes
22 (0.7) ondan sonra:(0.5) uyandıktan sonra oniki gibi bir gibi
then after waking up like twelve or one
23 öğlen mesela
at noon, for example
24 -> Pt: °e:vet°
yes
25 P: tekrar tansiyon yükseliyo=
blood pressure rises again
26 -> Pt: °e:vet°
yes
#Pt nods his head
27 P: sabah içseni#:z (0.5)gün boyu normale döner(.) akşam gece on gibi:
if you take it in the morning, it will return to normal all day long,
at about ten at night
28 -> (0.8) tekrar tansiyonunuz #3yükselir
your blood pressure rises again

```

Figure 3. Extract 3-Blood pressure

All in all, this study explored that the pharmacist demonstrated his expertise knowledge through a wide range of interactional practices such as providing extended explanations and advice, repeating some statements, giving information about the medicine usage instructions, referring to external authority, and using both professional and trade knowledge in response to the patients' requests for clarification and confirmation based on the medical knowledge in the community interaction. The CA findings of this study also highlighted that the pharmacist's "doing being an expert" [50] resulted in the change of the epistemic asymmetry of the ongoing interaction for the patients from less to more knowledgeable about the medicines and enabled them to buy the medicines. Overall, Conversation

Analysis offered in-depth investigations of displays the pharmacist's expertise knowledge in pharmacy interaction with the diversified expertise knowledge provision practices to manage the patients' epistemic search sequences. We believe that the micro-analytic findings of this study can be utilized in pharmacy education to develop the pharmacy students' and pharmacists' interactional and professional skills to establish more patient-centred communication in an evidence-based way. In this study, we illustrated the displays of one pharmacist's expertise knowledge, but further studies can be carried out with more pharmacist participants in different community pharmacy and country contexts to reach fuller understandings of the pharmacy interaction and provide more recommendations for the community pharmacy communication.

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Concept: E.U.D.; Design: E.U.D., M.B.; Control: M.B.; Sources: E.U.D.; Materials: E.U.D.; Data Collection and/or Processing: E.U.D., M.B.; Analysis and/or Interpretation: E.U.D., M.B.; Literature Review: E.U.D., M.B.; Manuscript Writing: E.U.D., M.B.; Critical Review: M.B.; Other: -

CONFLICT OF INTEREST

The authors declare that there is no real, potential, or perceived conflict of interest for this article.

ETHICS COMMITTEE APPROVAL

The study protocol was approved by the Hacettepe University Senate Ethics Committee.

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