Pharmacists' responses to cues and concerns of polypharmacy patients during clinical medication reviews—A video observation study

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A B S T R A C T

Objective: The research questions of this study are 1) How do pharmacists respond to negative emotions of patients during a clinical medication review (CMR)? 2) How do patients express negative emotions during a CMR? 3) Who (pharmacist or patient) initiates a negative emotion to be discussed during a CMR?

Methods: We used video-recordings to observe 132 CMR interviews of 49 pharmacists. Videos were coded with the Verona coding definitions on emotional sequences(-provider responses) (VR-CoDES(-P)).

Results: In total 2538 negative emotions were identified, mainly expressed as cues (95.0 %). Often cues were expressed as verbal hints to hidden concerns (33.2 %) or were related to cognitive or physical causes (28.3 %).Three-quarters of the negative emotions were elicited by patients. 2670 pharmacists' responses were coded. The most common response was non-explicit providing space (77.6 %) and the least common response was explicit reducing space (5.8 %).

Conclusion: Pharmacists are mainly non-explicitly providing space in their responses. While this hinders their ability to capture patients' problems it also may enable patients to initiate topics.

Practice implications: : Pharmacists are able to respond to patients' negative emotions. Training should focus on developing pharmacist's skills to be more explicit in their responses to get more in-depth knowledge of patients' problems.

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1. Introduction

A clinical medication review (CMR) is an evaluation of the appropriateness of a patient's medication and the patient's experiences with the medication. [1,2] The focus of CMRs are drug related problems, medication management, medication adherence and patient's quality of life. [3,4] Patients with multimorbidity, polypharmacy and complex medication therapy seem to benefit most from a CMR [5–8]. Often these problems do not occur one at the time, making a CMR a complex consultation. A CMR is a multidisciplinary effort between patient, physician and pharmacist. The process of a CMR is described in a five-step model; (1) patient interview, (2) pharmacotherapeutic analysis, (3) develop treatment plan, (4) establish treatment plan with patient, (5) follow-up of the treatment plan. The pharmacist often conducts the interview with the patient to explore patient's experiences with medications and identify drug related problems [9]. To appropriately discuss all of the patient's problems, pharmacists require good communication skills for in depth consultation with the patient [10–12].

So far, communication research in the pharmacy setting has mainly focused on the content of the communication; medication instructions, duration of treatment and costs. [13–15] The pharmacists' behaviour in communication is a less explored area; how do pharmacists respond to patients? This aspect of communication is important to create an atmosphere where patients feel encouraged to disclose their problems and feel comfortable to ask questions. [15–17]) Pharmacists' response behaviour is especially important when patients present emotional cues and concerns – "unpleasant feelings or stressful emotions or issues experienced by the patient that have distinct subjective importance and a potential negative emotional impact". [18] A study among pharmacist prescribers showed that they provided space to patients for further disclosure of cues and concerns during private consultations in 81 % of the time [19]. This is comparable to the responses of nursing staff to patients' emotional cues during private consultations [20–25]. Whereas physicians are less likely to further explore patients' emotional cues, their positive responses vary from 33 to 80% [19,22,24,26–28]. Responding to cues and concerns was perceived challenging for pharmacy staff during consultations at the counter in Dutch pharmacies. Staff members explored or acknowledged the cue or concern only half of the time [15,17]. However, these studies mainly included pharmacy technicians. Driesenaar et al. (2016) show that pharmacists' and pharmacy technicians' communication behaviour is not alike, with pharmacists responding more affectively to patients' cues during private consultations [29]. An affective communication style is associated with a positive outcome on patients' well-being [30–32]. Though, none of the previous studies have in-depth explored patients' expression of negative emotions during a private consultation and pharmacists' response behaviour to these negative emotions. Therefore, the aims of this study are 1) How do pharmacists respond to negative emotions of patients during a clinical medication review? 2) How do patients present negative emotions during a clinical medication review? 3) Who initiates a negative emotion to be discussed during a clinical medication review?

2. Methods

2.1. Study design

We conducted a cross-sectional video observation study to observe the communication between pharmacists and polyphar- macy patients during clinical medication review interviews. The interviews took place either in a private area in the pharmacy or at the patient's home. Data were collected between June-October 2018.

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2.2. Study setting

Video-recordings were made during clinical medication review (CMR) interviews in the community pharmacy. Selection of eligible patients was done in accordance with patient, pharmacist and physician. Eligibility criteria were risk of inappropriate medication therapy, risk of medication related problems, or risk of medication related hospital admission. A CMR could also be requested by the patient. [9]

2.3. Participants

Pharmacists enrolled in the post-graduated education program for becoming a specialized community pharmacist (ApIOS program) participated in the study as part of their curriculum. [33] The ApIOS program is a two year on the job specialization training for licensed pharmacists. The program includes several educational modules to enhance pharmaceutical expertise, communication, collaboration, scholarship, health advocacy, management and professional development [33]. These pharmacists are already fully licensed and they often conduct CMRs in practice.

In total 51 pharmacists were invited to participate and asked to recruit patients eligible for a CMR. Eligibility criteria for a CMR vary across practices, but are often based on criteria set by a primary care guideline for polypharmacy patients which were adopted by the Health and Youth Care inspectorate. According to this guideline eligible patients are ≥ 75 years of age, use ≥ 7 chronic medications and have an additional risk factor (kidney failure eGFR < 50 ml/min/1.73m^2, high risk of falling, cognitive impairment, medication non-adherence, assisted living, recent acute hospital admission). [9,34] Healthcare insurances sometimes add additional risk factors to make a smaller selection. Also pharmacists may identify patients outside those criteria (e.g., medication management problems, recent hospital admission) and patients may ask themselves for a CMR. Pharmacists were asked to report the specific reason for inclusion. The pharmacist selected eligible patients in collaboration with the general practitioner. The pharmacist invited patients by telephone or in person in the pharmacy for a CMR and provided the patient with information about the study. Pharmacists were provided with patient information sheets to inform the patients about the study. Patients could also contact one of the researchers (LvE) in case of questions and further clarifications. If a patient agreed to participate in the study, the pharmacists scheduled an appointment for the CMR. Patients signed informed consent prior to the observation. The pharmacists were informed about the general goals of the communication study, but were unaware of the exact analyses that would be performed. Results of the study were provided to the pharmacists after closing the data collection.

2.4. Data collection

Data was collected through video-recordings and surveys. The clinical medication review interview was video-taped by the pharmacists themselves. For reasons of privacy, the video camera was positioned in such a way that the pharmacist was filmed in front and the patient from the back. After the interview the patient completed a paper-based questionnaire regarding demographic information. Pharmacists were asked to complete two online surveys after completing all of their interviews. The first survey included questions about the interviewed patients; reason for inclusion, current medication overview, comorbidities and total number of patients invited and reasons to decline participation. The second survey included questions about demographic information of the pharmacist; age, gender, year of graduation, work experience, type of pharmacy and passed education modules of the ApIOS program.

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2.5. Analyses

The communication between the pharmacist and the patient was analysed with the Verona Coding Definitions of Emotional Sequences (VR-CoDES) and the Verona Coding Definitions of Emotional Sequences – Provider Responses (VR-CoDES-P).(VR-CoDES manual [35]) With the VR-CoDES we coded all patients' negative emotions expressed during the clinical medication review interview with the pharmacist. Negative emotions can either be expressed as a concern or a cue. Whereas a concern is "a clear and unambiguous expression of an unpleasant current or recent emotion", a cue is "a verbal or non-verbal hint which suggests an underlying unpleasant emotion and would need clarification from the health provider" [35,36]. The expression of a cue is divided into seven subcategories A to G, vague or unspecified words (cue A), hidden concerns (cue B), physiologic or cognitive correlates (cue C), neutral expression (cue D), repetition (cue E), non-verbal cue (cue F) or past emotion (cue G) [35,36]. Besides categorizing the expressed negative emotions, we also indicated whether the negative emotion was initiated by the pharmacist or by the patient. Pharmacist initiated negative emotions were questions in which the pharmacist asked the patient about a specific negative emotion that was then confirmed by the patient.

Secondly, the pharmacists' responses to the negative emotions were coded according to the VR-CoDES-P. The VR-CoDES-P uses a two-dimension model to categorize the pharmacist's behaviour. The pharmacist's response can either be explicit or non-explicit, indicating whether the pharmacist's response includes the specific wording or elements the concern or cue refers to. Thereafter, the pharmacist's response was assessed for providing or reducing space for further disclosure of the concern or cue. The responses were subdivided into 17 specific response types. [35,37] All of the negative emotions and provider responses were coded by a team of three researchers (LvE, JC, MV). The first 12 interviews were double coded by LvE and JC and discussed after every fourth interview to reach consensus about the coding. After reaching consensus, LvE coded all the interviews and any doubt was discussed with the research team. Afterwards, five videos were double coded by MV to assess agreement once again.

We decided to directly code the interviews from the video-observations, without transcribing them first. Therefore, we were unable to calculate Cohen's kappa for agreement as done previously [18] as we were not able to count the number of uncoded turns of both patients and pharmacists. The agreement was based on calculating the number of overlapping cues and concerns. The agreement across all double coded interviews was 65 %. All of the coding was performed in Atlas.ti 8.4.15.0.

Survey data was processed with Stata SE 15.0. To calculate the number of chronic comorbidities we used the list of 109 chronic comorbidities provided by the Dutch Government. [38] Chronic medication use was determined on ATC/DDD Index and the assumption of chronic use (Appendix A, Table 1). [39]

2.6. Ethical statement and privacy

The medical ethical committee of the University Medical Centre Groningen in Groningen, The Netherlands, determined that this research was not subject to the Medical Research Involving Human Subjects Act. The study has been registered in the University Medical Centre Groningen Research Register with study number 201800271. All patients have been informed about the study prior to the interview and were given the opportunity to ask questions and request for additional information. They could contact their own pharmacist as well as the researchers. All patients signed informed consent on the day of the interview and remained the rights to withdraw from the study at any time by completing a withdrawal form. Video recordings were sent to the researchers through a secured connection. Data were stored on a secured server of the University of Groningen and all research material was provided with a study ID. Study data were only available to the primary researchers.

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3. Results

3.1. Participants characteristics

Of the 51 pharmacists invited, 49 submitted 146 video-recordings of clinical medication review interviews. Of those 146 video-recordings, 132 were suitable for analysis (Fig. 1). The pharmacists had invited in total 301 (range per pharmacist 3–40) patients to participate in the study. Reasons for patients not to participate were privacy, perceived lack of benefit or preference to discuss medication with their physician. The interviews varied in length from 7.9 min to 92.0 min with a mean of 34.6 min (SD 14.5). The majority of the pharmacists were female (71 %), with a mean age of 30 years (SD 5.2) and a mean work experience of 2.2 years (SD 1.2) (Table 1). The patients (52.3 % female) had a mean age of 74 years (SD 10.4) and about 60 % had only finished primary- or secondary school. 73.7 % of the interviews took place in the pharmacy. The main reasons for being invited for a CMR were; meeting criteria of the healthcare insurance (41.4 %), criteria of the Health and Youth Care Inspectorate (39.1 %) and medication management problems (25.6 %). Four patients had requested a CMR themselves. Pharmacists could indicate more than one reason for inviting patients. The most common chronic comorbidities among the patients were hypertension (67.4 %) and diabetes mellitus type 2 (51.5 %). On average the patients used 8.9 (SD 3.3) different chronic medications. (Table 2)

[Table 1] [Figure 1]

3.2. Negative emotions identified in CMR interviews

We identified negative emotions in all of the 132 analysed CMR interviews, ranging from 2 to 97 instances with a total of 2538 expressions of negative emotions. The vast majority of these negative emotions were expressed as cues (95.0 %) and only 5.0 % as a concern. Cues were often presented by patients in the form of verbal hints to hidden concerns (cue B, 33.2 %). Patients emphasized the severity of the problem or used metaphors to give a better description of their feelings. About a quarter of the expressed negative emotions were related to cognitive or physiological causes (cue C, 28.3 %). Patients described the impact of physical impairments due to their illnesses and worries they had about them. Part of the expressed negative emotions were related to events in the past (cue G 15.5 %). The referral to these past problems highlighted the impact it had had on their life or still might have. Also, the use of neutral expressions (cue D, 14.3 %) was a way for patients to inexplicitly express stressful events. The use of vague words (cue A, 6.8 %), repetition (cue E, 0.9 %) and non-verbal expressions (cue F, 1.0 %) were less common ways for patients to express cues. Three-quarters of the negative emotions were initiated by the patients and 24.6 % was initiated by the pharmacist. (Table 3)

[Table 2]

3.3. Pharmacists' responses

In total we identified 2670 pharmacists' responses to patients' cues and concerns. The number of responses was slightly higher than the number of negative emotions, because sometimes a cue or concern was followed by more than one pharmacist response. The majority of the pharmacists' responses was non-explicit (77.6 %) referring to the patients' negative emotions. In 59.5 % of the time these non-explicit responses provided space for further disclosure of the patients' negative emotions. The most common non-explicit, providing space pharmacists' response was back-channelling (28.1 %), very brief verbal encouragements towards the patient to continue talking. Secondly, pharmacists used active invitation (12.3 %) – mainly by asking quick questions – to get a better understanding of the patients' problem. To a lesser extent pharmacists non-explicitly provided

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space for patients by remaining silent (silence, 6.5 %), acknowledging that the patients' cue or concern is being heard (acknowledgement, 6.3 %) or showing empathy without direct referral to the problem (implicit empathy, 6.2 %). Non-explicit reducing space responses (18.1 %) were provided by either completely ignoring (ignore, 7.0 %) the patients' cue or concern, providing the patient with information about the problem (information-advice 6.3 %) or by deliberately shifting away from the patients' cue or concern (shutting down, 4.7 %). (Table 4)

Pharmacists' were explicit in 22.4 % of their responses to patients' negative emotions. Just as when they were non-explicit, the larger part of explicit responses provided space (16.6 %) for patients to further disclose their cue or concern. Half of the explicit providing space responses had an exploring nature of the content of the cue or concern (content-explore, 8.2 %). Pharmacists requested more information from the patient by directly referring to the topic of the cue or concern. Also, specific acknowledgement (content-acknowledgement, 6.1 %) of the cue or concern was used by the pharmacist to receive more information from the patient. Pharmacists did not often explicitly respond to the affective part of a patients' cue or concern. Exploration of the affect (1.3 %), acknowledgement of the affect (0.8 %) and explicitly showing empathy (0.3 %) were rather uncommon responses for pharmacists. The smallest proportion of the pharmacists' responses were categorized as explicit reducing space (5.8 %). Pharmacists explicitly reduced space by providing information with direct referral to the cue or concern (Information-advice, 3.1 %) or by changing the time frame or context of the cue or concern (switching, 2.2 %). In a handful of cases the pharmacists postponed discussion of a cue or concern to another moment (post-ponement, 0.4 %) or actively blocked discussion of the cue or concern at all (active blocking, one response). (Table 4)

[Table 3]

4. Discussion and conclusion

4.1. Discussion

Pharmacists were able to provide space for patients to disclose their negative emotions during CMRs. They mainly responded in a non-explicit way which leaves patients space to continue unguided about an emotion. The pharmacists' open attitude during CMRs gave patients the opportunity to initiate the discussion of negative emotions and problems. This is a remarkable difference compared to consultations at the counter where pharmacy staff took the lead in discussing possible problems. [15,17] However, the situations at the counter and during a CMR are not directly comparable. Patients are invited for a CMR, giving them the chance to prepare themselves. Also, during a CMR patients have much more privacy than at the counter, probably making them feel more comfortable to share problems [40].

Previous studies investigating pharmacists' responses to patients' cues and concerns did not specify explicitness, but only indicated providing or reducing space for patients for further disclosure of their cues and concerns. During counselling sessions about inhaled corticosteroids, pharmacists provided space in 40 % of their responses. [41] The explicitness of responses was assessed in studies with other primary healthcare providers. Nurses interacting with older patients or patients with mild mental health problems and general practitioners mainly responded in a non-explicit providing space way to patients' negative emotions, with brief verbal encouragements as the most common response [21,23,27]. These studies – as well as our study – are in line with the ambitions in healthcare to make consultations more patient-centred instead of provider-centred [12].

The large proportion of non-explicit providing space responses probably reflected on the length of CMR interviews, some taking over an hour. The length of CMRs varied considerably across the submitted videos. Longer duration of a CMR might lead to patients addressing more cues and concerns, also cues and concerns unrelated to medication use. The content of the cue or concern

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might affect the duration of the encounter, with patients' informational cues leading to more exploring responses compared to responses to patients' pure emotional cues. [41] If pharmacists would use a more explicit manner of responding, they could guide the consultation to focus on medication-related issues or they could use reducing space responses to avoid wandering off topic. However, patients presented their negative emotions mainly as cues, which are harder to pick up for pharmacists than concerns. This means that pharmacists had to ask more questions to fully capture patients' problems. Patients presenting negative emotions mainly as cues is also common among consultations with other primary healthcare providers. [20,27,42] Nurses' and physicians' explicit responses to patients' cues and concerns vary from 12 to 82% [21,23,24,27].

This is the first study in community pharmacy to examine patients' negative emotions during a pharmacist-patient discussion about medication therapy. With the changing role of pharmacists towards patient-centred care, appropriate communication skills have become more important. [10–12] Communication education is embedded in the pharmacy undergraduate curriculum and in the post-graduated education program to become a community pharmacist [33,43]. The pharmacists enrolled in our study were able to provide space for patients to disclose their problems. Still, improvement of communication is possible on explicit exploration of patients' cues and concerns and carefully reducing space from time to time when wandering off topic. This is a challenging matter since appropriate communication is a delicate balance between discussing health related topics and building rapport with the patient [14,16]. Insufficient communication could harm the relationship between pharmacists and patients by undermining the patients' competence, integrity and self-governance. [44] This may cause patients to fall back to their own coping strategies with the risks of misunderstanding and failing therapy [45].

[Table 4]

5. Strengths and limitations

Our study is the first large scale video observation study to assess pharmacist-patient communication behaviour. Previous research focused on communication style and content from a pharmacists' perspective and focused on a different type of patient encounters (at the counter, inhalation instructions). To this existing literature we added how pharmacists respond to what the patient discloses during a private consultation. The pharmacists who participated in the study were all at the same stage of their career. The results of this study set a solid baseline measurement of communication skills of pharmacists. However, this study also had its limitations. First, the Hawthorne effect may apply to our study, because the pharmacists were aware of their CMR interviews being recorded on video. From previous research it is known that the presence of just a video camera probably did not cause many changes in the pharmacists' behaviour. [46] We can therefore assume that the behaviour of non-observed pharmacists will be comparable to the pharmacists included in our study. Second, we assessed inter-rater agreement by coding a number of videos independently, but we were unable to calculate Cohen's kappa for agreement as has been done previously [18]. We directly coded the fragments from the videos without transcribing them. Therefore, we were not able to count the number of no-cue turns. The calculated agreement was only based on the percentage of overlapping turns coded as cue or concern resulting in an agreement of 65 %. This agreement is comparable to the agreement reported in the method's manual when recalculating the agreement only based on overlapping coding of cues and concerns. [35]

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5.1. Conclusion

In CMRs, patients presented their negative emotions mainly as cues, verbalised as hidden concerns or related to physical or cognitive origins. Pharmacists' responses were mainly non-explicit providing space. While these non-explicit responses may have hindered pharmacists' ability to capture patients' problems it also may have enabled patients to introduce negative emotions to be discussed. Also, non-explicit responses might lead to lengthy inefficient CMR interviews in which the conversation wanders off medication related issues. Three-quarters of the discussion of negative emotions was elicited by patients.

5.2. Practice implications

The results of our study provide a first insight in how patients express negative emotions during a CMR interview with their pharmacist and how pharmacists respond to patients' negative emotions. The fact that patients mainly express themselves in cues indicate they are willing to share information, though they might be hesitant to be explicit. Pharmacists are able to provide space for patients to further disclose their problems. The training of pharmacists should focus more on developing skills to be more explicit in their responses to get more in-depth knowledge of patients' problems. These skills are especially important when communicating with patients who are more reluctant to share problems. On the other hand, pharmacists' responses are also influenced by how patients disclose negative emotions and the content of the cues and concerns. This should also be taken into account during communication training for pharmacists. Research should study the influence of pharmacists' communication on patients' therapy outcomes, a topic currently underserved in communication research in community pharmacists. [47]

Author statement
I confirm all patient/personal identifiers have been removed or disguised so the patient/person(s) described are not identifiable and cannot be identified through the details of the story.

Declaration of Competing Interest
LvE: None
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CRediT authorship contribution statement
Linda van Eikenhorst: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Validation, Visualization, Writing - original draft. **Liset van Dijk:** Conceptualization, Methodology, Supervision, Writing - review & editing. **Jasper Cords**: Formal analysis, Investigation, Validation, Writing - review & editing. **Marcia Vervloet**: Validation, Writing - review & editing. **Han de Gier**: Conceptualization, Funding acquisition, Methodology, Writing - review & editing. **Katja Taxis**: Conceptualization, Methodology, Supervision, Writing - review & editing.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.pec.2019.11.032.

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Tables and figures

Table 1 Characteristics of the pharmacists.

Characteristic		Missing data
N	49	
Female	76 %	0
Age	29.8 yrs SD 5.2	2
Work experience	2.2 yrs SD 1.2	1

Figure 1. Flow chart data collection

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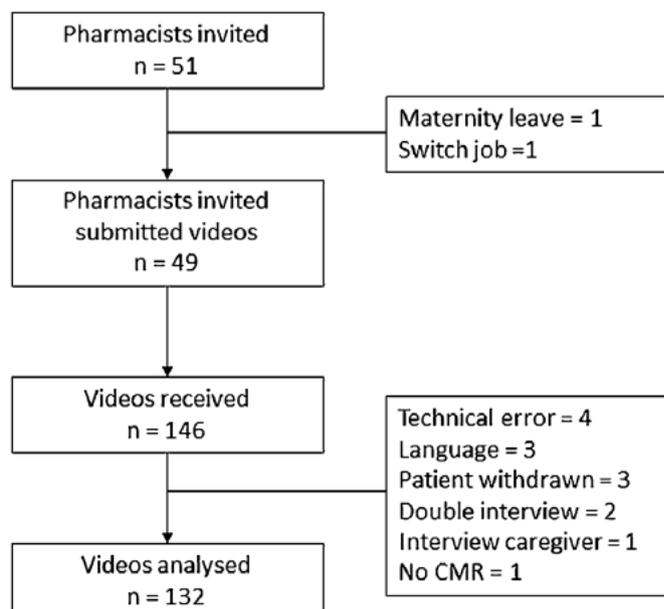
Table 2   Characteristics of the patients.

Characteristic	
N	132
Female	52.3 %
Age	73.8 yrs SD 10.4
Education	
Primary school	12.9 %
Secondary school	47.7 %
Vocational training	10.6 %
Degree university of applied sciences	9.8 %
Degree research university	3.8 %
Other	7.6 %
Missing	7.6 %
Interview location	
In the pharmacy	74.2 %
At home	20.5 %
Other	3.0 %
Missing	2.3 %
CMR reason[1]	
Criteria healthcare insurance	40.9 %
Criteria Health and Youth Care Inspectorate	39.4 %
Medication management	25.0 %
Recent hospital admission	12.1 %
Medication adherence	10.6 %
Cognitive impairment	6.8 %
Low (health) literacy	6.8 %
Low social economic status	6.1 %
Non-supportive environment	5.3 %
Other (diabetes, polypharmacy, request patient, request doctor)	34.8 %
Duration CMR interview (minutes)	34.6 SD 14.5
Chronic comorbidities per patient	2.9 SD 1.4
Top 5 comorbidities[2]	
Hypertension	67.4 %
Diabetes mellitus type 2	51.5 %
COPD	17.4 %
Ischemic heart disease	15.2 %
Gout	12.9 %
Chronic medications per patient	8.9 SD 3.3
Total number of chronic prescriptions	1,151

[1] More than 1 reason could apply per patient; see methods section for more details of the criteria; [2]Percentage of patients diagnosed with comorbidity.

Table 3   Negative emotions presented by patients during CMR interview.

Negative emotion	#	%	Example
Concerns			"I am afraid the dose is sometimes too high."
Pharmacist elicited		1.4 %	
Patient elicited		3.7 %	
Total		5.0 %	
Cues			
Cue A – Vague or unspecified words		6.5 %	"I think it happens because I'm a little tensed."
Cue B – Hidden concerns		31.6 %	"Keeping track of my medications, well it's quite a hassle."
Cue C – Physiologic or cognitive correlates		26.8 %	"Sometimes I have these headaches."
Cue D – Neutral expression		13.6 %	"At the moment my brother is very ill."
Cue E – Repetition		0.9 %	Pt discusses medication moments. "You have to keep track of time. Really, it is the time."
Cue F – Non-verbal cue		0.9 %	Pharm: "Shortness of breath?" Pt: *Sighs*
Cue G – Past emotion		14.7 %	"I was really anxious and I panicked when I had this difficulty breathing."
Pharmacist elicited		23.2 %	
Patient elicited		71.7 %	
Total		95.0 %	
Total pharmacist elicited		24.6 %	
Total patient elicited		75.4 %	
Overall total	2538	1.0 %	
Range	2-97		

Pt = patient, Pharm = pharmacist.

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Table 4   Pharmacists' responses to patients' cues and concerns.

Type of response	#	%[1]	Example
Non-explicit – Reducing space			
Ignore		7.0	Pt: "My bladder is very sensitive." Pharm: "What kind of medication do you use for the nausea?"
Shutting down		4.7	Pt: "Well, it's annoying the haemorrhoids." Pharm: "Ok. I think we have discussed all the physical problems now."
Information-advice		6.3	Pt: "Maybe we can stop one of those antihypertensive drugs." Pharm: "Yes, you are using quite a few. The lisinopril, metoprolol as well (. . .)."
Total NE-RS		18.1	
Non-explicit – Providing space			
Silence		6.5	Pt: "Sometimes I have problem falling asleep." Pharm: *Keeps quiet and nods*
Back-channel		28.1	Pt: "I just feel very weak." Pharm: "Hmm."
Acknowledgement		6.3	Pt: "I'm very insecure when walking. And this part of the city isn't the easiest for walking." Pharm: "No, that's true."
Active invitation		12.3	Pt: "In my back, it's this uncomfortable feeling." Pharm: "Is it always or sometimes?"
Implicit empathy		6.2	Pt: "It took very long before they knew it was my heart." Pharm: "Hmm, I'm sorry."
Total NE-PS		59.5	
Explicit – Reducing space			
Switching		2.2	Pt: "I'm not sure if I should continue with this drug." Pharm: "Did you discuss this with your doctor?"
Post-ponement		0.4	Pt: "In the afternoon I feel like I have no energy left." Pharm: "Alright, we can discuss that in a bit."
Information-advice		3.1	Pt: "Why do I need simvastatin?" Pharm: "Everyone with DM has a higher risk of cardiovascular diseases, that's why they start the simvastatin right away."
			Pt: "I don't understand why I keep forgetting those pills." Pharm: "It doesn't matter. We'll find a way."
Active blocking		0.0	
Total E-RS		5.8	
Explicit – Providing space			
Content – Acknowledgement		6.1	Pt: "It makes me sleepy. It takes till noon to really wake up." Pharm: "So it makes you sleepy."
Content – Explore		8.2	Pt: "Sometimes I lose my balance and then I wonder how?" Pharm: "Do you recognize it when you lose your balance?"
Affect – Acknowledgement		0.8	Pt: "When you're feeling sick but the tests don't show anything. You're really (. . .)." Pharm: "You get insecure."
Affect – Explore		1.3	Pt: "It is those panic attacks. I really panic." Pharm: "And what is it exactly that makes you panic?"
Affect – Empathy		0.3	Pt: "I'm not feeling well." Pharm: "I understand it can be disturbing if you feel so troubled all the time."
Total E-PS		16.7	
Total Non-explicit responses		77.6	
Total Explicit responses		22.4	
Total Reducing space responses		23.9	
Total Providing space responses		76.1	
Overall total responses	2670	100	

[1] Percentage of total number of responses, NE-RS = non-explicit reducing space, NE-PS = non-explicit providing space, E-RS = explicit reducing space, E-PS = explicit providing space, Pt = patient, Pharm = pharmacist.