

# Communication between Patients and Pharmacy Staff on Patient Information Leaflets

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**Abstract:** *Objective:* Product Information Leaflets (PILs) are an important source of information for patients on their medication, but may cause confusion and questions. Patients then may seek clarification, for instance from pharmacy technicians. The aim of this study was to explore which questions pharmacy technicians get about PIL-related issues, why and when, and how they handle such questions.

*Methods:* an online survey in a panel of 785 Dutch pharmacy technicians.

*Key results:* Net response rate was 37%. PIL-related questions frequently concerned drug actions, problems with use, side effects, intolerances and pregnancy and lactation. Patients who received generic alternatives instead of the branded product they had received previously, also came more often to pharmacy staff with PIL-related questions.

The requested information could not always be found in the PIL itself, not even by the pharmacy technicians themselves. They mentioned that the PIL is not easy to read, understand or recall.

*Conclusions:* Pharmacy staff is often approached by patients having difficulties in understanding PILs. Even pharmacy technicians find PILs difficult to read and often use other sources of information. PIL layout and contents should become more standardized and easier to read and understand.

**Keywords:** Product Information Leaflet [PIL], pharmacy technicians, patient questions, drug information, cross-sectional study.

## INTRODUCTION

Patient Information Leaflets (package inserts, PILs) aim at providing patients with correct information and supporting them to properly use their medication. Since 1992, the European Union [EU] requires that every package of medication has a Patient Information Leaflet [1]. EU Directive 2001/83/EC states that “*the package leaflet must be written and designed to be clear and understandable, enabling the users to act appropriately, when necessary with the help of health professionals*” [2]. EU regulations also mandate pharmaceutical companies to perform a readability test. At least 16 out of 20 participants in such a user test should be able to find the information in the PIL, to correctly answer questions about it and to make proper use of the information [3]. This should lead to a Patient Information Leaflet that is accessible to and understandable for patients [3]. However, previous research shows that PILs are sometimes unclear or complex [4-6] and that many patients have difficulty

understanding medical terms such as contra-indications and interactions. This is particularly true for patients with low education or low literacy [7-13] or the elderly [14]. In an Italian study, more than half of the patients [53%] experienced difficulties in finding the right information in the PIL because of its unclear structure [15], while in another study patients found the font size of the letters too small [16]. Poor design, along with long lists of side effects, are also major causes for negative views on leaflets [17].

Pander Maat and Lentz [5] found that none of the three PILs they investigated complied with the EU readability test. These difficulties in readability and usability of the PIL may cause patients to read it only if the medicine is new to them or if any side effect is experienced.

So far, research has mainly focused on patient experiences with the information provided by PILs and on PIL comprehension [5-17]. It has been less studied how patients get answers to their questions when they encounter such difficulties. Patients can, for example, search the internet or social media, they can contact their physician, or they can get the information from the

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person from whom they have received the leaflet. In the Netherlands, it is the pharmacy technician who dispenses the majority of medicines in community pharmacies. Main tasks of pharmacy technicians include dispensing prescription drugs to patients (under a pharmacist's supervision), and instructing patients on the use of their medication [18]. Until now, no studies have been performed on the role of pharmacy staff in providing information and patient support on PIL-related questions and how they perceive questions that patients address to the pharmacy.

Therefore, the aim of our study was to:

1. Describe the type and frequency of questions on (the use of) Patient Information Leaflets [PILs] that patients ask to pharmacy staff, as perceived by pharmacy technicians themselves,
2. Explore what sources of information pharmacy technicians use to respond to these questions,
3. Describe pharmacy technicians' own experiences with, and attitudes towards PILs.

### Impact for Practice

- Product Information Leaflets (PILs) are an important source of medication-related information to patients, but may give rise to confusion and may lead to questions to pharmacy technicians.
- At refill pharmacy technicians should explicitly ask the patient whether the PIL has been read, understood, and whether it has raised any questions.
- It is important that the information provided by pharmacy staff (both oral and in written form) is consistent with that in the PIL.
- Standardization of PIL layout, size and content is highly desirable.
- Pharmacies may consider developing websites that provide patients with tailored information on their disease and medication.
- Extra topics such as administration of drug products in case of swallowing difficulties and preparation for administration may add to better PIL usability.

## METHOD

### Population

A web-based cross-sectional survey was conducted among 785 pharmacy technicians employed in community pharmacies in the Netherlands. All respondents were members of a country-wide panel of pharmacy staff coordinated by SIR, Institute for Pharmacy Practice and Policy in Leiden, the Netherlands [Stevenshof Instituut voor Research, 18]. This panel is used regularly for practice-based research among Dutch pharmacy staff.

The panel, includes pharmacy technicians from both urban (29.4%) and rural regions (70.6%). The average age of panel members is 45 years, 98.7 % are female. This corresponds largely with the total Dutch population of pharmacy technicians. Recruitment for the panel had occurred through advertisements on the website of the Dutch National Pharmacy Technician Association, in their professional journal and by distributing flyers to attendees of annual pharmacy technicians' conferences.

### Questionnaire

A structured questionnaire was developed, which is available (in Dutch) from the corresponding author on request. An English summary is given in Appendix A.

Respondents were asked to recall patient questions about PILs. The questionnaire contained the following sections:

- Introductory questions determining respondents' characteristics and the frequency with which respondents receive PIL-related questions.
- Questions patients ask to pharmacy staff about PILs: the characteristics of patients (age, gender, etc.) who frequently ask PIL-related questions, the kind of questions and the reasons patients have for asking questions.
- Abilities and tools of pharmacy staff in order to cope with patient questions: how easily can they find the requested information in PILs, and which other sources of information do they use.
- Attitudes of pharmacy staff towards PILs: how easily they understand and memorize the information and what sort of information did they miss in the PILs.

When opinions were asked, 5-point Likert scales were used. For questions on frequencies scales such as: 'never/sometimes/often' were used. Possibilities for the respondent to give his or her own opinion or additional information were included.

Alternative answer categories were first piloted and screened for face validity by five pharmacy technicians working in different community pharmacies in the Netherlands.

Prior to the study, the research protocol and the questionnaire were piloted and checked and approved by our Review Board on study relevance, privacy maintenance and methodological soundness. Ethics Committee approval was not deemed necessary. Nor was informed consent required for this particular study, since respondents had already previously volunteered to become a member of the panel.

### Data Analysis

STATA 11 software was used to calculate univariate and bivariate descriptive analyses.

## RESULTS

### Response

The gross response rate was 39% (N=304). After exclusion of invalid and incomplete responses the net response rate was 37% (291 pharmacy technicians, 98.7% female). They had an average work experience of 18 years. The pharmacies where they work were spread across the country.

### Patient Questions to Pharmacy Technicians

Nearly four out of ten pharmacy technicians (39%) stated that they receive questions from patients about PILs on a weekly basis, and another four out of ten (38%) reported they get such questions monthly. Respondents stated that female patients address pharmacy staff with questions more often than males, and elderly patients do so more often than younger patients. Parents frequently ask questions on behalf of their children, while teenagers rarely ask questions (Table 1).

The technicians stated that patients with cardiovascular diseases accounted for most of the PIL-related questions (25% answered: 'often'), followed by stomach complaints (17% 'often'), neurological disorders (14% 'often'), diabetes (12% 'often'), cancers

(10% 'often') asthma/COPD and rheumatoid arthritis (both 8% 'often'), and osteoporosis (7% 'often') (Table 1).

**Table 1: Patient Characteristics with Respect to PIL-Related Questions to Pharmacy Staff [n=291]**

Patient characteristics	Variables	Frequency of Patient Questions [%] Often Sometimes Never		
		Often	Sometimes	Never
Gender	Female	32	68	0
	Male	5	88	7
Age	Elderly patients >65 years	34	63	3
	Parents, on behalf of their children	30	67	3
	Adults (18-64 years)	25	73	1
	Teenagers (12-17 years)	1	17	82
Main disease categories of patients asking questions				
	Cardiovascular diseases	25	73	2
	Stomach complaints	17	78	5
	Neurological disorders	14	62	24
	Diabetes	12	79	9
	Cancers	10	55	35
	Asthma/COPD	8	80	12
	Rheumatoid arthritis (RA)	8	81	11
	Osteoporosis	7	71	22

In addition, we asked what type of medication led to the PIL-related questions that the technicians received. 13% of the respondents stated that this was on medication for cardiovascular diseases, 9% for antibiotics, 9% for GI medication, 7% stated that questions were about neurological medication and about OTC medication, respectively. Other drug categories were mentioned less frequently, and about 1 out of 4 respondents did not recall which indication areas or drug types were the main cause of questions by patients.

Pharmacy technicians reported that patient questions were most often associated with intolerances (50% 'often') pregnancy and lactation (44% and 35% 'often', respectively), allergies (37% 'often'), and polypharmacy (17% 'often'). Questions on stomach bleeding (8% 'often'), renal and liver impairment in the

history (4% 'often') were less frequently reported (Table 2).

**Table 2: Pharmacy Staff Responses on Experiences with Medication causing Patients to Ask Questions to Pharmacy Staff [n=291]**

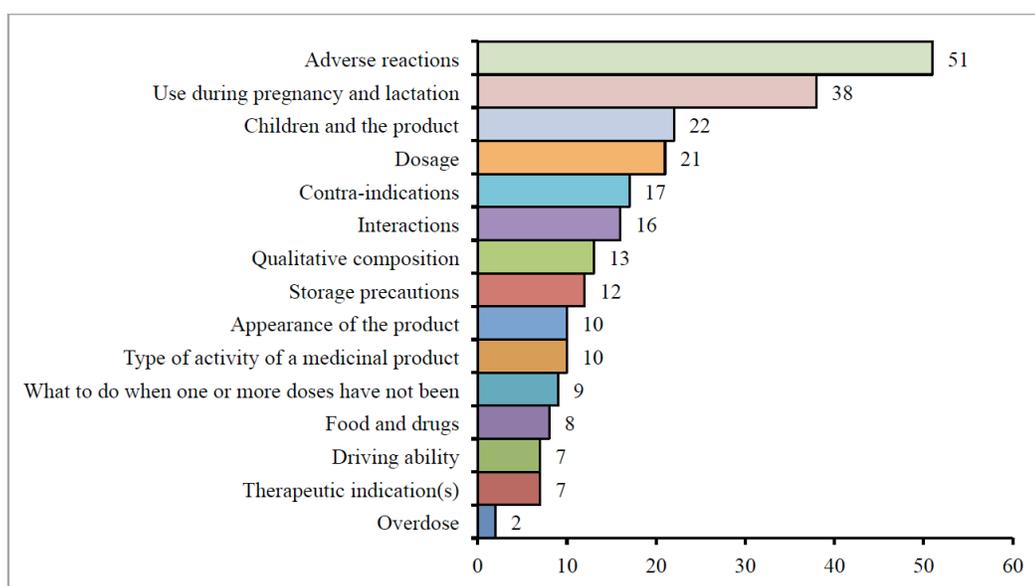
	Categories	Frequency of patient questions [%]		
		Often	Sometimes	Never
Experiences with medication	Patients with intolerances after earlier use of various medications	50	46	4
	Pregnant women	44	51	5
	Patients with certain allergies	37	58	5
	Breast feeding women	35	58	7
	Polypharmacy patients (using 5 or more different drugs per day)	17	69	14
	Patients with GI bleeding in their medical history	8	69	23
	Patients with renal or liver function impairment	4	66	30

The questionnaire also contained items about the extent to which questions were asked about topics mandatory in the PIL (Figure 1). Consistent with the results described above, adverse effects (51%) and pregnancy/ lactation (38%) were the most common topics. Questions about medication to be used in

children (22%) and on dosing (21%) were also asked frequently. To a somewhat lesser extent contra-indications (17%) and drug interactions (16%) were motives for asking questions. Other mandatory PIL topics lead to questions less often.

We were also interested in reasons for patients to ask for clarification of PIL-related questions (Table 3). First, earlier experiences with medication drive patients to ask questions. A majority of the technicians stated that patients are more likely to ask questions than usual in case of problems related to use of medication (71%), because of doubts about the medicine's efficacy (74%), or when experiencing side effects (58%). In addition, almost three quarters of the technicians (71%) stated that patients ask questions after comparing PILs of innovative products with their generic alternatives, which may cause uncertainty and ambiguousness. Also, a change in the appearance of the pill box may be a cause for questions (65%), as is mass media publicity (59%).

It appears that most questions are asked at first dispense of a (new) medication (27% of respondents mentioned this as an important reason), and that the frequency of asking questions gradually decreased during refills (21% at second supply, 18% at third or subsequent supplies). Another occasion when patients ask questions is during so-called project weeks organized by the pharmacy. During these weeks, education on e.g. asthma or diabetes is provided to the general public. Almost a quarter (23%) of respondents



**Figure 1: Mandatory topics in the PIL which most frequently were motives of patient questions (in %, n=291) (more than one answer was possible).**

stated that such projects lead to more patient questions about the PILs.

**Table 3: Pharmacy Staff Responses on Reasons for Patients to Ask Questions More Frequently than Usual [n=291]**

	Reasons	In %
Patient experiences	Related to the drug's actions	74
	In case of complaints or problems in use	71
	Because of side effects encountered	58
External influences	In case of substitution from branded to generic product	71
	In case of change in appearance of boxes (e.g. due to brand change)	65
	When the medication has been discussed or mentioned in (mass) media	59
Pharmacy-elicited motives	During first supply education*	27
	During second supply education**	21
	During third or subsequent repeat supplies**	18
	During a project week, for example on asthma/COPD or diabetes education organized by the pharmacy	23

\*When the pharmacy technician explains use of the drug product and PIL contents at first dispense.

\*\*When the pharmacy technician asks whether there have been any questions during the weeks after earlier supply.

## Technicians Perceptions on PILs

### Technicians' Ability and Tools to Answer PIL-Related Questions

The second part of our study was devoted to the issue how pharmacy technicians deal with patient questions about the PIL. First, respondents were asked to what extent the PIL itself was a source of information for answering their own questions. Over a third (37%) of the respondents often look for information in the PIL itself, while 63% sometimes do so. Nearly seven out of ten (69%) technicians stated they can find the requested information often, the others can find it sometimes. In particular, information about dosing and side effects could be retrieved in the PIL itself.

Technicians reported that issues such as possibility to cut or powder tables (90%) and on administration in case of swallowing problems were missing in the PILs (63%) (Table 4).

Other sources of information pharmacy technicians use to answer PIL-related questions included textbooks

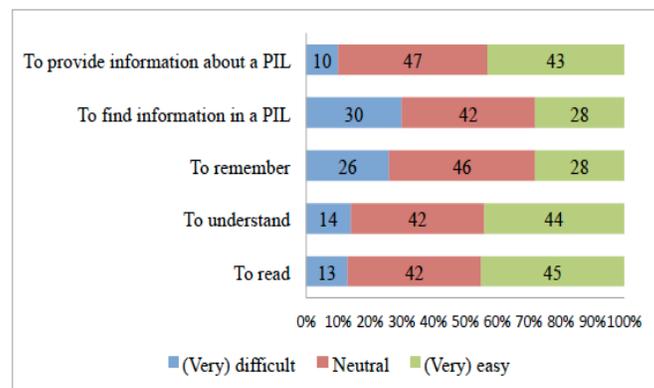
or (digital) pharmacy handbooks (used by 65% of respondents who had indicated they use other references), own professional experience (64%), the pharmacist (44%) or colleagues (43%). The prescribing physician (4%) or the industrial supplier (3%) were consulted less frequently. There was no statistically significant relationship between pharmacy technician's ease of use of PILs and their work experience.

**Table 4: Topics Pharmacy Technicians are Missing in Industry-Supplied PILs [in % of Respondents, n=3291] [More than One Answer was Possible]**

Topics missing in industry-supplied PILs	%
Is it allowed to cut or powder a tablet?	90
How to use the drug when the patient has problems swallowing?	63
A referral to a website with more detailed information	29
Any information on long-term use	28
Appearance of the drug product	16
Alternative treatments	7
Other issues: expiry date, excipients and preferred moment of administration were mentioned	11

### Pharmacy Technicians' Own Experiences with and Attitudes to PILs

In finding information in the PIL itself, the [mandatory] format of the PIL does not appear to be helpful: only 28% of respondents can find their way easily (Figure 2).



**Figure 2: Rate of ease of use of PILs according to responding pharmacy technicians [n=291].**

Recalling information from the PIL is not very simple: just 28% regarded this as easy. Less than half (43%) of the responding pharmacy technicians felt they could provide sufficient information to patients about the contents of the PIL (Figure 2).

A large majority of the respondents (85%) stated that PILs should be made more understandable for patients and over half of respondents believe PILs are too complex. They mentioned the following potential improvements: all PILs should have the same format (particularly in case of different brands for the same active ingredients), PIL retrieval on the web should be better, the language should be easier and the print size larger. Nearly one fifth of respondents (18%) stated that PILs should be made more patient-friendly and easier to read.

## DISCUSSION

Patients frequently approach their pharmacy staff with PIL-related questions.

Pharmacy technicians receive questions about PILs once a month to at least once a week. This is striking, because PILs should be 'clear and understandable' (3). It has been reported elsewhere that the PIL often is not sufficient or clear enough to give all the answers patients are looking for [6, 20-25].

Women and older patients were perceived by technicians to be the patients who most frequently asked questions. Generally, women look more often than men for health information [26]. Senior patients use more medication and often their regime is more complex, which may lead to more questions, for example because medicines may interact with each other [27, 28].

Cardiovascular and gastro-intestinal medication were mentioned most often as reasons for PIL-related questions (Table 2), which is probably caused by the fact that these products are dispensed more frequently than other drugs [27].

Most PIL-related questions occur after the moment of first dispense. At refills patients ask questions less frequently, which is in line with earlier reports [17, 21]. The information provided by pharmacy staff at first supply of the drug product apparently does not answer all (potential) questions, and at subsequent supplies questions are still asked, albeit to a lesser extent.

Furthermore, we found that patient questions about drug efficacy, issues with administration of the drugs or side effects were most abundant. Efficacy seems to be a more common cause for questions than side effects. This despite earlier reports that the side effects section of the PIL is most often read and causes most

questions to physicians [17, 29, 30]. The reason for this may be the fact that side effects are more often discussed with the physician than with pharmacy technicians - because patients do not think pharmacy staff can help them in such cases -, or because upon administration of e.g. cardiovascular [antihypertensive] drugs the effects of the medication are difficult to perceive [31].

'External' influences frequently lead patients to address pharmacy technicians with questions. One example of such an external influence is substitution from branded products to generics or from one generic brand to another one. A recent survey in the same panel showed that pharmacy technicians are frequented daily by patients who have questions about the consequences of this substitution [31].

With respect to topics legally required to be included in a PIL, it is particularly side effects and use during pregnancy and lactation that were mentioned as causes for patient questions. Also, use in children, dosing, contraindications and drug/drug interactions were frequent causes for questions, despite the EU requirement for readability tests [3]. Apparently, mandatory topics and readability requirements are not sufficient to prevent ambiguity.

The PIL does not always provide the pharmacy technician with sufficient information to answer patients' questions, even though pharmacy technicians are used to coping with drug-related information and PILs. The respondents themselves gave solutions to this problem, such as mandating a standard format for all PILs, a larger print size and better internet links. These improvements are in line with those recommended in studies where patients were judging PILs [6, 12, 13, 21, 32-39].

It is generally accepted that better patient knowledge about action, side effects, dosing and way of administration of medication is an important factor to improve drug adherence [40]. It is the responsibility of the pharmacy staff to provide such information, solicited or unsolicited. Hughes [17] stated that *'accurate information and advice from health care professionals could serve to reassure patients and to ensure that they are well informed about the medicines they take'*.

A Patient Information Leaflet needs to be supportive to this information. However, it appears that the PIL, by contrast, often causes confusion and ambiguity

among patients. It is not known how many patients do **not** contact the pharmacy or other health care providers and what consequences this may have – in terms of non-adherence, side effects, dosing errors or even hospital [re]admissions.

## CONCLUSION

Although Patient Information Leaflets (PILs) should be clear and understandable, pharmacy technicians often get questions about them. Adverse events were the most frequent reasons for questions. Pharmacy staff often have to turn to other sources than the PIL itself to answer such questions. Even they feel that PILs are frequently difficult to read, to understand and to memorize. Improving clarity and readability of PILs hence seems of prime importance to reduce the number of PIL-related questions in the pharmacy and to improve patients' understanding of PILs.

## LIMITATIONS OF THIS STUDY

The online questionnaire was distributed among members of a large panel, who voluntarily became a panel member. This means that they participate in surveys more often than other pharmacy technicians, which may cause response bias. Additionally, a response rate of less than 40% for a panel like this is relatively low. Yet, the panel members form a cross section of all Dutch pharmacy technicians.

The questionnaire was based on post-hoc self-reporting, which may have affected the results due to recall bias. We asked pharmacy staff about their impressions of how often they had had questions about PILs and about the nature of these questions. We do not know how accurate these impressions were. Recalling the frequency and nature of questions asked by patients about PILs and the reasons why patients have asked such questions may have caused memory bias. We did not question pharmacy staff whether they knew how often and how well patients really consulted the PILs. Moreover, in The Netherlands there are both EU mandated PILs (supplied by manufacturers) and patient leaflets for pharmacies to print out and supply them to patients.

Further research in patient populations and with other health care workers such as physicians and nurses is needed, as well as a longitudinal study in which pharmacy technicians are asked to monitor actual questions over a period of time.

Yet, this study shows that pharmacy staff are frequently addressed by patients because of questions they have regarding PILs.

## FUNDING

This research received no specific grant from any funding agency in the public, commercial or non-profit sectors.

## COMPETING INTERESTS

The authors declare that they have no competing interests in relation to this study.

# Appendix

## Appendix A. Questionnaire for pharmacy technicians panel (English translation)

First, we would like to ask you a few questions on how you yourself use the PILs that every pharmaceutical company is obliged to provide with each pack.

Please note that the questions both refer to prescription drugs and OTCs

1. How often do you yourself look for information in a PIL?
  - a. Never → to question 4
  - b. Sometimes → to question 2
  - c. Often → to question 2
2. Can you usually find the information you are looking for?
  - a. Never
  - b. Sometimes
  - c. Often
3. Which of the following topics do you sometimes look for yourself in a PIL? (various answers possible)
  - a. Storage information
  - b. Adverse reactions
  - c. Contra-indications
  - d. Dosing
  - e. Use during pregnancy and lactation
  - f. Indications
  - g. Interactions
  - h. Use in children
  - i. Overdosing
  - j. Driving ability

- k. Composition
  - l. Drug appearance
  - m. Food and other medication
  - n. What to do if a dose has been forgotten
  - o. Drug action
  - p. Others.....
4. How easy or difficult (in a Likert scale from very easy to very difficult) do you think it is to:
    - Read a PIL
    - Understand a PIL
    - Remember PIL information
    - Find information in a PIL
    - Gives advice on PIL-related information
  5. How important (in a Likert scale from very unimportant to very important) do you think it is that PILs should inform patients on the following topics:
    - a. Storage information
    - b. Adverse reactions
    - c. Contra-indications
    - d. Dosing
    - e. Use during pregnancy and lactation
    - f. Indications
    - g. Interactions
    - h. Use in children
    - i. Overdosing
    - j. Driving ability
    - k. Composition
    - l. Drug appearance
    - m. Food and other medication
    - n. What to do if a dose has been forgotten
    - o. Drug action
  6. Which type of information do you sometimes miss in PILs (various answers possible)
    - a. I (almost) never miss anything in PILs
    - b. What to do in case of swallowing problems
    - c. Is it possible to cut or powder a tablet
    - d. Referral to a website with pertinent information
    - e. Drug product appearance
    - f. Long-term effects, if known
    - g. Alternative treatments
    - h. Other information, such as.....

The following questions pertain to questions that patients ask you about or in relation to PILs

7. Has it occurred that patients pose questions to you in relation to PILs?
    - a. Never → to question 22
    - b. Sometimes → to question 8
    - c. Often → to question 8
  8. How often during the past two months did patients pose questions to you in relation to PILs?
    - a. More than once a day → to question 9
    - b. Daily → to question 9
    - c. Weekly → to question 9
    - d. Monthly → to question 9
    - e. Less than once a month → to question 9
    - f. None at all → to question 19
- The following questions pertain to the characteristics of the patients who have posed PIL-related questions to you
9. How often (on a scale never-sometimes-often) do the following types of patients come to you with PIL-related questions?
    - Gender
      - o Male
      - o Female
    - Age
      - o Youngsters (12-16)
      - o Parents, for their children
      - o Adults (18-64) for themselves
      - o Senior citizens (>65 years)
  10. How often (on a scale never-sometimes-often) do patients with the following chronic diseases come to you with PIL-related questions?
    - Asthma/COPD
    - Diabetes
    - Cardiovascular diseases
    - Cancer
    - Stomach complaints
    - Osteoporosis
    - Nervous complaints
    - Rheumatic complaints
  11. How often (on a scale never-sometimes-often) do patients with the following experiences come to you with PIL-related questions?
    - Patients with certain allergies
    - Patients who have had intolerances during earlier use of the drug product
    - Patients with impaired kidney – or liver function
    - Patients who had stomach bleeding
    - Patients using more than 5 different medications
    - Pregnant women
    - Women who give breast feeding
  12. Are there certain moments at which patients ask PIL-related questions more than usually? (various answers possible)
    - No
    - Yes, during first supply
    - Yes, during second supply
    - Yes, during refill
    - During a thematic information week

- Due to complaints or problems with drug use
  - Due to side effect experiences
  - In relation to the drug product's effectiveness
  - In case of substitution from innovative drug to a generic form
  - In case of changes in product appearance (e.g. packaging, also in relation to substitution from innovative drug to a generic form)
  - When the drug product has been in the news or in a TV program
  - Others, such as.....
13. Can you indicate how often (on a scale never-sometimes-often) patients ask questions to you in relation to the following topics?
- a. Storage information
  - b. Adverse reactions
  - c. Contra-indications
  - d. Dosing
  - e. Use during pregnancy and lactation
  - f. Indications
  - g. Interactions
  - h. Use in children
  - i. Overdosing
  - j. Driving ability
  - k. Composition
  - l. Drug appearance
  - m. Food and other medication
  - n. What to do if a dose has been forgotten
  - o. Drug action
14. Are there any other topics in relation to PILs on which you get questions from patients?
- a. Yes, namely....
  - b. No
19. How often (on a scale never-sometimes-often) do you use any of the following sources to answer patients' PIL-related questions? (various answers possible)
- a. I use my own knowledge
  - b. I search for the information
  - c. I ask my colleagues – pharmacy technicians
  - d. I ask my pharmacist
  - e. I ask the company owning the product
  - f. I ask the prescribing physician
  - g. I ask a patient organization
20. Where do you usually find the information needed to answer a patients' PIL related question? (various answers possible)
- a. Pharmaceutical Association database
  - b. Pharmacotherapeutisch Kompas
  - c. Informatorium Medicamentorum
  - d. Pharmacy database
  - e. Through the web
  - f. Industrial supplier
  - g. Other, namely.....
21. How in general have you gathered you the knowledge that helps you to answer patients' PIL-related questions? (various answers possible)
- a. Own experience
  - b. During my education to become pharmacy technician
  - c. Through refreshment courses
  - d. Through personal study
  - e. During staff meetings
  - f. By another education, namely....
  - g. Other, namely.....

The following questions pertain to the last time a patient came to you with a PIL-related question

15. To which product did the question pertain?
16. What was the main question?
17. Were you able to answer the question?
  - a. Yes, with the help of the PIL
  - b. Yes, with another source
  - c. No
18. Have you got this PIL-related question or a similar one more regularly?
  - a. No
  - b. Less than once a month
  - c. Monthly
  - d. Weekly
  - e. Daily

The following questions pertain to the information and sources that you use when answering patients' PIL-related questions

The following questions are about (1) PILs in different languages (2)'Own' pharmacy PILs (3) absent PILs

22. Does it occur that you provide a patient with a PIL in a different language?
  - a. Never
  - b. Less than once a month
  - c. Monthly
  - d. Weekly
  - e. Daily
23. Does your pharmacy provide patients with 'own' PILs or instructions?
  - a. Yes → to question 23
  - b. No, only the PIL provided by the drug company → to question 25
24. Who developed this information? (various answers possible)
  - a. The chain to which our pharmacy belongs
  - b. The UI rom
  - c. The pharmacy itself

- d. I don't know  
e. Other, namely.....
25. When is this information provided to the patient?  
(various answers possible)
- At all supplies
  - At first or second supply
  - At certain drug product groups only
  - For children
  - At pharmacy-manufactured products
  - Other, namely.....
26. If a pack is open and the PIL is absent, do you then provide the patient with a replacement?
- Yes
  - No
  - Not applicable: we do not open packs

This last question is about opportunities to improve or modify PILs

27. Which modifications would you like to improve PILs? (various answers possible)
- I do not think modifications are needed
  - The PIL should become more tailored to individual patients' needs
  - The PIL should be provided by the prescribing physician
  - The PIL should only be published on the internet
  - The PIL should be made easier
  - The PIL should be made more accessible to the patient (better readability, shorter etc.)
  - Other, namely.....

This is the end of the questionnaire, Thank you very much for completing it!

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