

# Qualitative research in pharmacy practice

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# Disclosure of conflict of interest

Research funding received over the last three years from:

- Pfizer/Abbvie
  - patient experiences with biological medicines
- Pfizer
  - Discrete choice model on DMARDS
- Astra Zeneca:
  - Prevalence of CVD in primary care

Other sources of funding: Ministry of Health, European Commission, Dutch Pharmacy Association, Medicines Evaluation Board, Netherlands Organisation for Health Research and Development, National Health Care institute, Netherlands Heart Foundation

1. In qualitative research, the researcher does not need to strive for a sample that is representative for the study population.  
True / false
  
2. The major aim of qualitative research is to serve as input for quantitative research  
True / false
  
3. What is triangulation in qualitative research?
  - A. At least two researchers have to analyse all data to increase validity
  - B. Using two or more techniques to validate outcomes on the same subject



PhD in Sociology

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Research article

Open Access

**Patient risk profiles and practice variation in nonadherence to antidepressants, antihypertensives and oral hypoglycemics**

Liset van Dijk\*<sup>1</sup>, Eibert R Heerdink<sup>2</sup>, Dinesh Somai<sup>1</sup>, Sandra van Dulmen<sup>1</sup>, Emmy M Sluijs<sup>1</sup>, Denise T de Ridder<sup>3</sup>, Anna MGF Griens<sup>4</sup> and Joziën M Bensing<sup>1,3</sup>

Table 1: Nonadherence in antidepressant use: results of the binomial multilevel analyses on early dropouts and continuers and on refill nonadherence

	Early dropout (0 = continuer; 1 = early dropout)		Refill adherence (0 = adherent > 80%; 1 = nonadherent)	
	Oddsratio <sup>a)</sup>	95% CI	Oddsratio <sup>a)</sup>	95% CI
<b>Socio-demographic characteristics</b>				
-age (mean; SD)	1.00	[0.99–1.01]	1.00	[1.00–1.00]
-% woman	0.78*	[0.63–0.95]	1.00	[0.84–1.19]
-% college/university	1.05	[0.80–1.36]	0.86	[0.69–1.09]
-% non-western	2.47*	[1.70–3.60]	2.59*	[1.75–3.82]
-% private insurance	1.06	[0.85–1.33]	0.95	[0.78–1.15]
-% living together	1.02	[0.80–1.29]	1.00	[0.82–1.21]
-% with job/study	1.26	[1.00–1.60]	0.88	[0.73–1.07]
<b>Use of medication</b>				
<i>Antidepressants</i>				
- % users of SSRIs	0.80	[0.59–1.08]	1.27*	
- % users of TCAs	1.55*	[1.14–2.11]	0.76*	
- % users of other antidepressants	reference		reference	

Quantitative studies

Contents lists available at SciVerse ScienceDirect

The Breast

journal homepage: [www.elsevier.com/brst](http://www.elsevier.com/brst)



ELSEVIER

Qualitative studies

Original article

**Disentangling breast cancer patients' perceptions and experiences with regard to endocrine therapy: Nature and relevance for non-adherence**

Hans Wouters<sup>a,\*</sup>, Erica C.G. van Geffen<sup>a</sup>, Monique C. Baas-Thijssen<sup>d</sup>, Elly M. Krol-Warmerdam<sup>c</sup>, Anne M. Stiggelbout<sup>d</sup>, Svetlana Belitser<sup>a</sup>, Marcel L. Bouvy<sup>a</sup>, Liset van Dijk<sup>a,b</sup>

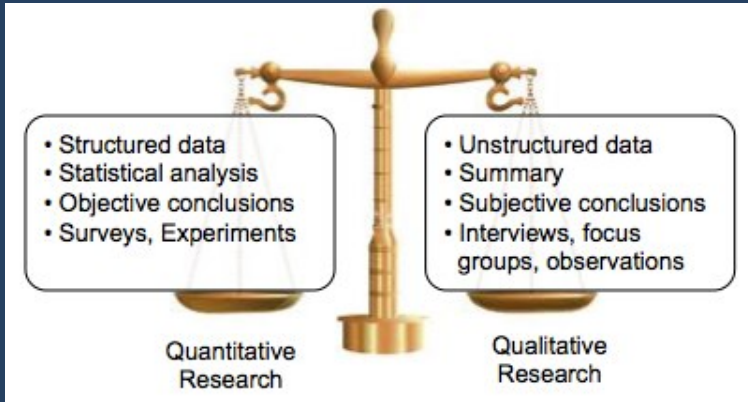
Endocrine therapy in an attempt to find potential determinants of non-adherence.  
**Method:** Online Focus Groups (OFGs) and individual interviews were conducted with 37 women who were treated with endocrine therapy. Sixty-three statements derived from the OFGs and 11 belief items from the Beliefs about Medicines Questionnaire (BMQ) were used in a Q-sorting task conducted with 14 of the women. The quantitative Q-sorting data were statistically analyzed with Hierarchical Cluster Analysis.

## Quantitative Methods



## Qualitative Methods





**Use Qualitative Research To:**

- ✓ Develop an initial understanding of an issue or problem
- ✓ Look for a range of ideas and feelings about something
- ✓ Understand different perspectives between groups and categories of people
- ✓ Uncover underlying motivations and factors that influence decision making and opinions
- ✓ Provide information needed to design a quantitative study
- ✓ Explain findings from a quantitative study

**Use Quantitative Research To:**

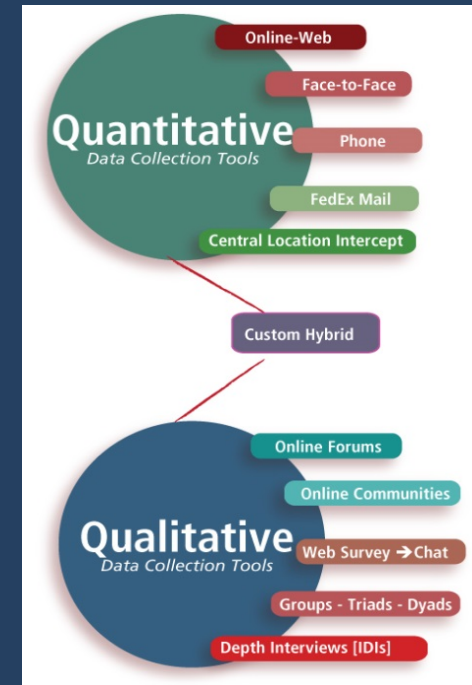
- ✓ Recommend a final course of action
- ✓ Find whether there is consensus on a particular issue
- ✓ Project results to a larger population
- ✓ Identify evidence regarding cause-and-effect relationships
- ✓ Describe characteristics of relevant groups of people
- ✓ Test specific hypotheses and examine specific relationships
- ✓ Identify and size market segments

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Type of Market Research: Qualitative vs. Quantitative

Qualitative Market Research	Quantitative Market Research
Based on opinions and experiences	Based on numbers
Smaller sample	Larger sample
Interviews, focus group	On-line & postal surveys, CATI surveys
In-depth analysis	% of people agreed with a statement
Open Ended questions	Mostly Closed questions

Market Research Agency with in-house contact Centre  
[www.aremconnect.com](http://www.aremconnect.com)





Qualitative



Quantitative

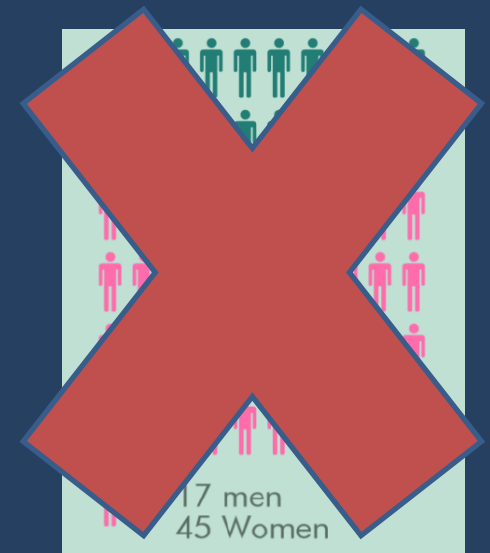
- Often assumed that one is better than the other
- However, there is a growing consensus that BOTH types of approaches are useful to answer research questions
- How to decide which one to use?





# Qualitative research: when?

- Exploring opinions, barriers, motivators etc
  - Developing insights , especially if not much is known about a subject
  - Explaining findings from quantitative research or to prepare quantitative research
  - Understanding different perspectives
- 
- NOT: counting
  - NOT: representative studies



# Qualitative research



- Usually: small samples
- To understand events, actions, values and meanings from the respondent's perspective and
- To understand why people do what they do

Qualitative research is hypothesis generating rather than hypothesis testing and it is not about generalisability but getting insight in variety

# Qualitative research

- Usually: small samples
- To understand events, actions, values and meanings from the respondent's perspective and
- To understand why people do what they do
- So: listening to the views of a relatively small number of people

## Qualitative

- Hypothesis generating
- Close relationship between researcher and subject
- Flexible research strategy
- In depth data

## Quantitative

- Hypothesis testing
- Distant relationship between researcher and subject
- Fixed research strategy
- Prevalence data

Qualitative research:  
examples of research questions and  
objectives

The objective was therefore to identify the nature of the experiences and beliefs of women treated with endocrine therapy in an attempt to find potential determinants of non-adherence.

The aim of this qualitative study is to explore patient experiences with the use of biosimilars in comparison with the original product as well as the care the patient received

What are stakeholder opinions on changes in the Dutch law on OTC-medication?

The objectives of this study were to, first, describe the information exchanged between pharmacy staff and patients about prescribed medication at the community pharmacy counter, and second, to investigate to what extent this met professional medication counselling guidelines

The objective was therefore to identify the nature of the experiences and beliefs of women treated with endocrine therapy in an attempt to find potential determinants of non-adherence.

Online focus group

Focus group

The aim of this qualitative study is to explore patient experiences with the use of biosimilars in comparison with the original product as well as the care the patient received

Interviews

What are stakeholder opinions on changes in the Dutch law on OTC-medication?

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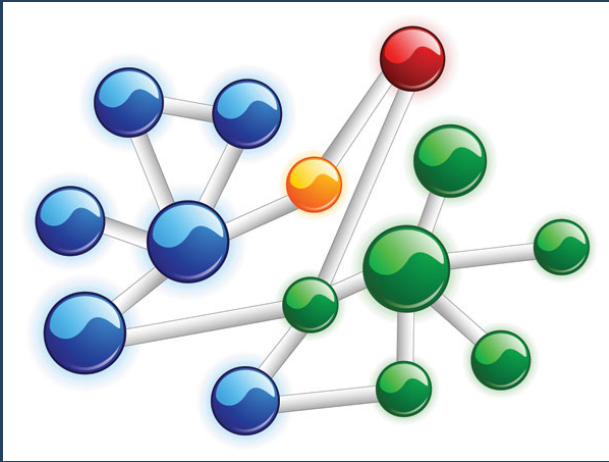
Video observation



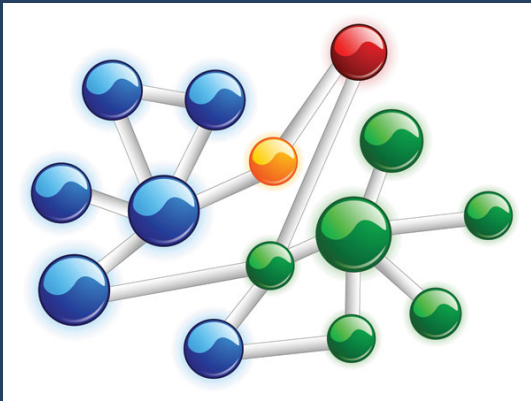
# Common research techniques



- In-depth interviews with individuals (semi-structured / open)
- Focus groups (also online)
- Observational studies



Interviews: structured versus indepth  
(or open or unstructured)



## Structured interviews (quantitative research)

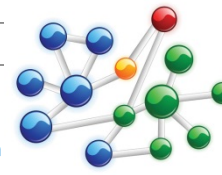
- Closed-end predefined questions in predefined order
- Mainly pre-defined answer categories (other, namely...): respondents have to choose
- Can reach a relatively large sample, which is representative for the research population
- Comparison in answers is possible, use of statistical methods
- Emphasis on reliability: how accurately can answers of respondents be compared?



## In-depth interviews

- Open questions, not always in a predefined order, more flexible
- Respondents can answer in detail using their own wordings
- Small samples: not representative
- Direct comparison in answers is difficult as each interview is unique
- Emphasis on validity: how close do answers of respondents get to the respondent's real views

### C. Samen beslissen over de medicatie & ontvangen informatie



9. Hieronder volgt een aantal uitspraken die gaan over het samen beslissen met de arts en/of specialistisch verpleegkundige over de behandeling. De beslissing waar de uitspraken over gaan is de beslissing om een **behandeling met een biologisch geneesmiddel te starten**.

Wilt u hieronder aangeven in hoeverre u het eens bent met deze uitspraken toen u voor het eerst een biologisch geneesmiddel kreeg?

	Volledig oneens	Sterk oneens	Licht oneens	Licht eens	Sterk eens	Volledig eens
a. Mijn arts en/of specialistisch verpleegkundige maakte me duidelijk dat er een beslissing genomen moest worden.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Mijn arts en/of specialistisch verpleegkundige wilde exact weten hoe ik betrokken wilde worden in het maken van een besluit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Mijn arts en/of specialistisch verpleegkundige vertelde me dat er verschillende opties voor de behandeling van mijn ziekte waren.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Structured questionnaire on patient experiences with care on biologicals*

Shared decision making: stating how much the respondent agrees with a certain aspect in the SDM process

## Onderwerp 2: shared decision making, 10 minuten

Doel: key topic

Vragen:

Denkt u nog eens terug aan het moment dat u, voor het eerst, uw biosimilar kreeg voorgeschreven.

✓ In hoeverre heeft u het gevoel dat u de keuze voor de biosimilar samen met uw arts heeft gemaakt?

### Indien gevoel van betrokkenheid:

- Hoe betrok de arts u bij de keuze?
- Wat vond u goed aan de manier waarop u werd betrokken?
- Wat kon volgens u beter? En hoe had dat beter gekund?

### Indien gevoel niet betrokken:

- Had u meer bij deze keuze betrokken willen zijn? Waarom wel/niet?
  - [Indien men meer betrokken had willen zijn]: hoe had dat volgens u beter gekund?
- ✓ In hoeverre was de manier van betrokkenheid bij de keuze voor de biosimilar hetzelfde of anders in vergelijking met andere geneesmiddelen die u gebruikt?
- ✓ [Indien anders]: Waarin zitten volgens u de verschillen?



*Indepth questionnaire on patient experiences with care on biologicals*

Start question: to what extent did you choose the biosimilar together with your doctor?

Next questions: depending on the answer of this questions

## EXAMPLE: What are stakeholder opinions on changes in the Dutch law on OTC-medication?

### In-depth interviews with stakeholders - steps taken

#### 1. Developing questionnaire

##### Topics covered

- a. Opinion on newly introduced system in OTC selling
- b. Opinion on role of drugstore in OTC selling
- c. Opinion of role of pharmacy in OTC selling

- What was your idea of the new classification of OTC medicines in three categories (Only pharmacy , Only pharmacy and drugstore , unrestricted selling
- How does your organization view the principle of this format?

**EXAMPLE: What are stakeholder opinions on changes in the Dutch law on OTC-medication?**

## **In-depth interviews with stakeholders – steps taken**

### 2. Deciding whom to interview

- all relevant national stakeholders

### 3. Planning, arranging and doing the interviews , recording!

- important to take enough time, create a good atmosphere

### 4. Analysis

- make a transcript for each interview
- search for themes in the transcripts (using software)
- cross-validate: two researchers independently code the transcripts
- discuss discrepancies in coding, recode



## EXAMPLE: What are stakeholder opinions on changes in the Dutch law on OTC-medication?

### In-depth interviews with stakeholders – steps taken

#### 5. Reporting

- Use quotes only in case they really illustrate your point
- Describe per emerging theme
- Only use names if permission is given

Report Van Dijk et al 2010.

Several interviewed parties criticize the way in which drug stores function with regard to OTC medication (*Consumer Union, NPCF, CBL, Neprofarm, KNMP*), although it is widely acknowledged that the CBD commits a lot of efforts to improve the situation). The Consumer Association states that there is a tension between the role in the law and the commercial interest that a drugstore also has.

# Focus group interviews





- A focus group is a (structured) discussion in which a small group of people (4-12), led by a trained facilitator, discuss their perceptions, opinions, attitudes and experiences
- Popular in health services, they engage patients and professionals in decision making



Advantages	Disadvantages
Relatively inexpensive	Requires a trained facilitator, quality depends on skills of facilitator
More likely to get candid responses	Generate a lot of qualitative data, sometimes hard to analyse
People react to each other and think together, come to ideas	Dominant participants
Useful for identifying participants' needs	Findings cannot be generalised to a larger population
	Participant might not say what they want to say (especially in case of sensitive issues or in case they have a different opinion)



## Steps to be taken:

- Developing topic list
- Preparing the FGs, using a script to plan the meeting
- Holding focus groups: one facilitator, one notilist
  - Introduction
  - Short questionnaire with background
  - Themes to discuss (i.e. you can use different ways of working, f.e. using exercises)
  - Just facilitate, do not join the discussion



## Steps to be taken: analysis

### **Transcript based:**

Analysing the full transcript, time consuming (1-16 hours per FG)

### **Tape based:**

Analysing the audiotapes, preparing a shortened transcript of the most relevant discussion and a brief summary (6-10 hours per FG)

### **Note-based**

Field notes are primary source. Facilitator and assistant debrief after the session, summary is made (3-4 hours per FG)

### **Memory based:**

Facilitators memory is primary source, most of the time presented orally after the FG (1 hour per FG)

**EXAMPLE: Patient experiences with the use of biosimilars in comparison with the original product as well as the care the patient received**

## Population

- FG 1: users of originator products, n=8
- FG2: Naive users of a biosimilar, n=4
- FG3: Switchers (biological → biosimilar), n=6
- FG 4: Deliberate non-switchers, n=3

Recruitment through hospitals and patient organisations

**EXAMPLE: Patient experiences with the use of biosimilars in comparison with the original product as well as the care the patient received – outcomes used for quantitative study**

Topics that emerged

- Knowledge on biosimilars (*low*)
- Reason to get a TNF alpha inhibitor (*illness, last option*)
- Expectations medication (*reluctant, see what happens*)
- Current experiences (*positive, but what if it doesn't work anymore?*)
- Adverse effects (*mixed results, some do, some not*)
- Shared decision making (*hardly ever, one direction*)
- Information (*sufficient to good*)
- Care received (*positive experiences, friendly, accessible*)
- Costs (*care should be about patient needs, not costs, but if cheaper is as good as expensive, then one might consider cheap*)



# New designs for focus groups



Online focus groups



Extended focus groups  
(platform)

# WOMEN WITH BREAST CANCER AND ENDOCRINE THERAPY: ONLINE FOCUS GROUPS ON MEDICATION USE & ADHERENCE

Liset van Dijk, Erica CG van Geffen, Kiek Bates, Anne M Stiggelbout, Marcel L Bouvy, Monique C. Baas-Thijssen, Hans Wouters

## Background & aim

Endocrine therapy is an effective adjuvant for women with hormone receptor-positive breast cancer. Not much is known about how these women experience their medication use. Using the new method of online focus groups (OFGs) we explored these experiences related to three stages of therapy use: 'Initiation', 'Implementation' and 'Discontinuation'

## Methods

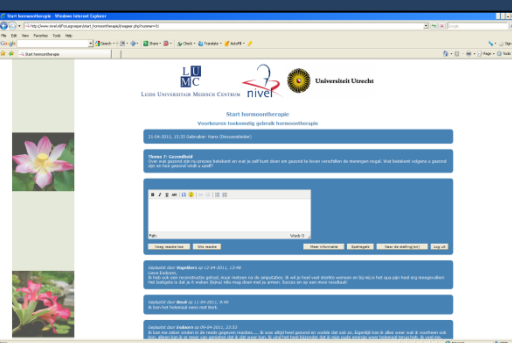
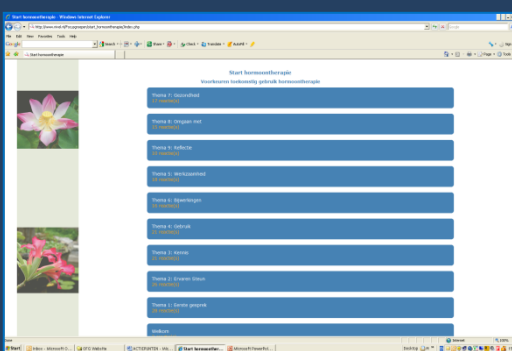
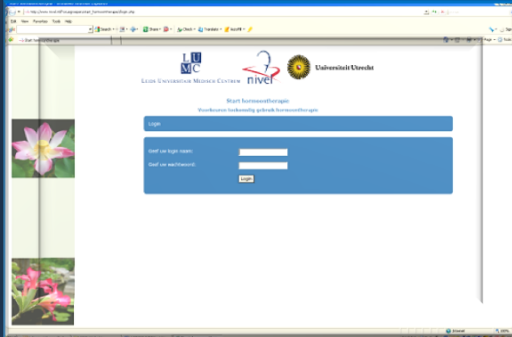
Qualitative OFGs were conducted with 35 female breast cancer patients who were prescribed endocrine therapy at the oncology clinic of Leiden University Medical Center or responded to our call through the Dutch Breast Cancer Patients Society. Women were divided in three groups: starters, and long-term users without or with relapse. A new topic was put on a secured forum every workday during two weeks. Only participants and two moderators had access. Women could react anytime they wanted to these subjects. After two weeks the forum was closed.

## Results

Most women accepted endocrine therapy as the final stage of a long process of treating breast cancer, although some doubted its effectiveness. Moreover, some women were not happy to be confronted with having had cancer every day for a 5 year period. During the implementation phase side effects were experienced but generally accepted as "part of the deal". Women wanted to have the feeling to have done everything they could to protect themselves for relapses. With regard to discontinuation after the five year treatment period, part of the women stated they would be relieved that the overall cancer treatment would be finished. However, others thought about discontinuing as "stopping to fight against the disease".

## Conclusion

Online Focus Groups are a useful method to explore patient's experiences with medication therapy in different stage of use. Women's experiences with endocrine therapy differ across stages of use but most women state they would never stop therapy before the treatment period of five years is over.



# Observational studies





- Study phenomena in their natural context
- Can be used quantitative and qualitative
- Quantitative: count how often something happens, can be generalized and statistically analysed
- Qualitative: describe how participants function in their natural settings, using field notes but also video observation



## Role of the observer:

- Non participant: distant & discrete, researcher is the one to guarantee high quality data, both quantitative and qualitative are possible
- Participant observation: researcher lives with participants, high degree of interaction, sometimes undercover, qualitative

**EXAMPLE:** Communication at the pharmacy counter

- Videotaping of 119 + 132 pharmaceutical encounters in 3 outpatient pharmacies and 153 encounters in 4 community pharmacies
- Patients gave informed consent
- Data were quantitatively and qualitatively analysed
- Quantitatively to count how often certain information was given and how pharmacy staff reacted to cues given by patients
- Qualitatively to give feedback to pharmacy staff on their communication style

## Abstract

**Objective** The objectives of this study were to, first, describe the information exchanged between pharmacy staff and patients about prescribed medication at the community pharmacy counter, and second, to investigate to what extent this met professional medication counselling guidelines.

**Methods** Pharmaceutical encounters were videotaped in four community pharmacies in the Netherlands. Patients were included if they collected a prescription for their own use. An observation protocol, including the MEDICODE checklist, was used to analyse the video recordings. A distinction was made between first and repeat prescriptions.

**Key findings** One hundred fifty-three encounters were videotaped. When dispensing first prescriptions, pharmacy staff provided most information on instructions how to use the medication (83.3%), form of the medication (71.4%) and treatment duration (42.9%). Topics for repeat prescriptions (such as the effects of the medication and the incidence of observed adverse effects) were rarely discussed. Pharmacy staff rarely encouraged patients to ask questions.

**Conclusions** Pharmacy staff members provided little medication-related information at the counter, especially for repeat prescriptions, did not encourage active patient participation, and thereby did not adhere to the guidelines of their professional organisation. Further research is needed to understand the reasons for this.

# COM-MA

Communicatie advies op maat voor de apothekemedewerker

Gesprek 1

Gesprek 2

Uitloggen

Feedback  
portal



Feedback on  
own work

## Welkom op de COM-MA webportal!

Hier vind je de filmpjes van twee baliegesprekken. Je kunt wisselen tussen de twee gesprekken door rechts bovenin voor "Gesprek 1" dan wel "Gesprek 2" te kiezen. Eerst willen wij graag weten wat jij zelf goed en minder goed vond gaan in deze gesprekken. Hiertoe vul je voor beide gesprekken de zelfreflectietaak in. Deze vind je direct onder de filmpjes. Als je deze hebt ingevuld, zetten we binnen een week je persoonlijke feedback klaar. Ook verwijzen wij je dan naar tips en tools om je communicatievaardigheden verder te kunnen verbeteren. Als je vragen hebt of een reactie kwijt wilt, kan dat *via het opmerkingenveld rechtsonder* of door direct contact op te nemen met de onderzoeker Marcia Vervloet (*zie contactgegevens onderin*). **Veel plezier met de COM-MA training!**

Zelfreflectie





## Feedback: tops



- Friendly and patient
- Clear instructions on mechanism, way to use medicine and (to a lesser extent) side effects
- Open attitude towards patient questions and cues
- Clearly structured consultations

## Feedback: tips



- Listen more carefully
- Better connect to patient's information needs
- Better pick up patient cues for potential concerns
- Ask more
- Say what you're doing when you're staring at the computer for a while

# Triangulation

- Using two (or more) methods to check the results on the same subject
- More confident with a result if different methods lead to the same result
- Facilitates validation of data through cross verification from two or more sources

# Wrap up - general

Qualitative and quantitative research have their own merits and can be complementary

Qualitative research is not designed to be generalisable

Especially useful to capture views, experiences, opinions and to know why people do what they do

# Wrap up - techniques

Indepth interviews and focus groups: to know more about what respondents think and do

Focus groups are relatively cheap, but not always the best option (for example sensitive issues)

Observations show how people act in their natural environment and can be used both quantitatively and qualitatively

1. In qualitative research, the researcher does not need to strive for a sample that is representative for the study population.

True

2. The major aim of qualitative research is to serve as input for quantitative research

False

3. What is triangulation in qualitative research?

Using two or more techniques to validate outcomes on the same subject

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