Session 3 – Investigating medicines use problems using qualitative methods

You should by now be orientated to some of the quantitative methods at your disposal for investigating medicines use problems in quantitative terms. Session 3 focuses on understanding the reasons for, and perceptions and experiences of irrational medicines use amongst individual patients and health worker communities at various levels within the health system, including facility and district or regional level.

This Session focuses particularly on qualitative or flexible methods. These methods are probably less familiar to you than the quantitative methods you studied in the previous session, but they are particularly suited to understanding reasons WHY a medicines use problem exists. During this Session you will watch a presentation, read some published material on the topic and complete some activities to reinforce your understanding. The activities have direct relevance to your first assignment.

**Session Contents**

Session 4 will cover the following topics:

1 Investigating medicines use problems

2 Using qualitative methods to investigate medicines use problems

3 Designing a qualitative study for investigating medicines use problems

4 Data analysis and presentation

5 Session summary

6 References and further readings

|  |
| --- |
| **Learning Outcomes**  By the end of the session, you should be able to:   * Discuss the value of qualitative methods in analysing medicines use problems * Select an appropriate sample for a medicines use problem * Design and apply a simple qualitative instrument to investigate medicines use problems * Write a report based on data collected in semi-structured interview * Describe the process of qualitative data analysis. |

**Readings**

Hardon, A., Hodgkin, C., & Fresle, D. (2004). *How to Investigate the Use of Medicines by Consumers.* Chapter 3: How to study medicines use in communities. Geneva: WHO & University of Amsterdam: 20-42.

<http://www.who.int/drugresistance/Manual1_HowtoInvestigate.pdf>

Hardon, A., Hodgkin, C., & Fresle, D. (2004). *How to Investigate the Use of Medicines by Consumers.* Chapter 6: Data analysis. Geneva: WHO & University of Amsterdam: 69-71.

<http://www.who.int/drugresistance/Manual1_HowtoInvestigate.pdf>

Robson, C. (2011). Part IV: Carrying out the project: Arranging the practicalities. *Real World Research.* Chichester. Wiley: 399-406.

**1 INVESTIGATING MEDICINES USE PROBLEMS**

In the previous session you were introduced to quantitative methods to investigate medicines use; however, in addition it is critical to know and understand the underlying causes of the problem, in order to design interventions to improve medicines use.

We have at our disposal two broad approaches for investigating medicines use problems, and learning more about their underlying causes – quantitative or fixed design approaches and qualitative or flexible approaches. In this regard, flexibility refers to the design of the study: quantitative research is designed at the outset according to fixed principles, and part of the rigour of the study depends on adherence to this design; qualitative research is iterative, and its design may evolve as the study proceeds.

You are probably more familiar with quantitative methods and data: these aim to quantify specific indicators, and make use of numeric data collected in the form of counts, rates or classifications. Quantitative data are useful for finding out what is happening in a given situation and how often it is happening. These data can be used to identify specific problems, or to measure the success of interventions which seek to rectify problems.

Qualitative investigations of medicines use can uncover things that quantitative methods cannot: this may include why particular things are the way they are, why people are behaving in a certain way and their perceptions of a particular situation or phenomenon. Since appropriate medicines use involves patients as well as providers, it is important that their perspectives are included in understanding the causes of irrational medicines use and subsequently in strategies to improve medicine use. In the next section we look at this in a little more detail.

**2 USING QUALITATIVE METHODS TO INVESTIGATE MEDICINES USE PROBLEMS**

**2.1 Different applications of qualitative methods**

Qualitative methods can be used in several different ways including:

* exploring a topic about which little is known in order to provide insights for interventions; this includes understanding or explaining people’s experiences and inquiring into the meanings people make of their experiences;
* investigating the feasibility, acceptability and appropriateness of potential interventions;
* informing the development of standardised instruments, like questionnaires;
* validating quantitative data through "triangulation," i.e. the use of multiple methods;
* complementing the quantitative component of a study by providing concrete examples or explaining observed practices of prescribers and dispensers;
* developing appropriate materials for educational interventions;
* identifying problems in ongoing interventions and suggesting appropriate solutions;
* assessing the impact of on-going or completed interventions.

**2.2 Strengths and limitations of quantitative and qualitative methods**

Both quantitative methods and qualitative methods are useful to investigate medicines use problems, however, each method has its’ strengths and limitations. It is important to bear these in mind when you are planning a study to investigate medicines use. Table 1 highlights some of the strengths and limitations of each approach.

**Table 1: Strengths and limitations of quantitative and qualitative methods**

|  |  |  |
| --- | --- | --- |
|  | **Quantitative Methods** | **Qualitative Methods** |
| **Strengths** | Results can be generalised to an entire population;  Results can be broken down by group;  Can provide indicators to guide policy;  Can be replicated through publishing standardised instruments;  Precise quality standards exist. | Reveals diverse and new understandings;  Provides rich description of social phenomena;  Enables researchers to gather data on sensitive topics;  Can include and empower participants. |
| **Limitations** | May sacrifice potentially useful information through aggregation;  Less able to report on difficult issues;  Parts of dataset may not be used;  Relatively expensive;  Errors can distort results. | Relatively time consuming;  Difficult to standardise interpretative categories with groups of researchers;  More difficult to demonstrate rigour;  Findings cannot be generalised and therefore less often used to influence policy. |

Adapted from Creswell & Plano Clark (n.d.).

One further issue to recognise is that qualitative research provides one with understanding of a situation, with insights into the qualities of a situation, rather than the extent or size of a problem. The findings of qualitative research are not generalisable to a population, and are often gathered to provide an overview of as wide a range of views as possible, i.e. what do different people say about a problem? This does not however make qualitative research less scientific; within its own terms, it *is* scientific, and has its own set of criteria for rigour. As Pope and Mays (1995) put it, qualitative research “reach[es] the parts other methods cannot reach”.

***Activity 1 - Reflect on your own research experience***

*Have you experienced any of these strengths or limitations in research you have been involved in?*

*Reflect on your own research experience and answer the question in the speech bubble.*

**Feedback**

The issue of generalizability seems to plague qualitative researchers, and those who favour a quantitative approach often struggle with this issue.

**3 DESIGNING A QUALITATIVE STUDY FOR INVESTIGATING MEDICINES USE PROBLEMS**

Several key aspects should be considered when designing a qualitative study:

1. Study population
2. Sampling
3. Data collection
4. Data analysis

**3.1 Study population**

As mentioned at the beginning of this session, there are two key populations that we are interested in with respect to medicines use. These are:

* consumers or patients and care givers of children and seriously ill patients
* health providers or health care workers including
  + prescribers (doctors and nurses)
  + dispensers (pharmacists, nurse aides)
  + others involved in medicines use (clinical assistants, health workers)

**3.2 Selecting a sample**

Your sample should have direct experience of the problem or phenomenon. For example, if you want to understand why patients default on their medicines, do not ask the nurses for opinions; ask the patients for their experiences. Nurses may however also have some valuable information, but are referred to as Key Informants because they do not have direct experience of the phenomenon. Of course, when we consider the consumers, we sometimes need to include care-givers, particularly when considering medicines use in respect of children or seriously ill patients. In the case of health providers we include prescribers, dispensers and others involved in any way with medicines use. In most situations doctors, nurses and pharmacists will be the primary cadres we would include in these types of studies. However, we should remember the roles played by mid-level health workers, such as dispensers and nurse aides in resource-constrained settings in sub-Saharan African countries, and increasing involvement of cadres like clinical assistants and community health workers.

As mentioned above we may also include Key Informants (abbreviated to KIs) who do not necessarily have direct experience of the problem, but by virtue of their position in the health system, have very important views on the topic. An example would be the district manager.

When considering the study population for investigating your medicines use problem, you need to consider the following questions:

* Who is affected by or affects this medicines use problem?
* Which categories of people can provide the best data to answer the research question?
  + Where are they?
  + What characteristics do they have?
* How many people and sites should we study?
* Do I have access to this population?
* Do I have permission (institutional and individual) to interview them?

**3.3 Developing a sampling strategy**

Sampling in qualitative studies is very different from quantitative studies. Take a look at the Presentation titled Sampling for Qualitative Research , for an overview of the purpose and characteristics of qualitative sampling, as well sample size and tips on how to get access to your sample.

Your starting point for identifying your study population and sample is your research problem and study objectives. Ask yourself: who will be able to provide the most authentic, and the richest answers to these questions? After viewing the Presentation above, try this activity.

***Activity 2 – Develop a sampling strategy***

*If there is a problem with the use of antibiotics in the treatment of diarrhoea in children in your district, what sampling strategy would you propose for a study to investigate this problem? Make notes of your answer.*

**Feedback**

Your sampling strategy should include:

• identifying your study population

• a description of your sample stating the different segments of the population, and how many individuals for each.

Your study population could include prescribers and/or consumers.

In this case, the prescribers would most likely include doctors and/or nurses, and the consumers would include children’s mothers or care-givers. You would not expect young children to be included in these semi-structured interviews.

Key informants might be helpful in this situation and could include the local preschool teacher. Remember, key informants are people that are likely to provide useful information about the issue, but are not the main interviewees.

There is not one correct answer to how you go about your sampling but you need to think it through carefully and ensure it is in line with the principles outlined in the presentation, Sampling for Qualitative Research.

Here is a sampling strategy that could be used:

• Identify two clinics with highest usage of antibiotics in children, and two clinics with lowest usage in your district. Then, in each clinic you could purposively sample a range of prescribers and children’s mothers or caregivers.

• For prescribers, you could choose to include a range of different types of prescribers, that is, doctors, nurses, older, newly qualified, those with specialist training and those with basic training. (These are called criteria for recruitment and selection). You could include about six prescribers per clinic and 24 in total.

• For children’s caregivers, you could select 10 from each clinic who have brought children with diarrhoea in during the past 6 months (40 in total).

This sampling strategy would enable you to get an idea of why antibiotic prescriptions vary between the two clinics, from the perspectives of consumers and different kinds of providers.

**3.4 Data collection**

There are several established methods for collecting qualitative data on medicines use problems. In this section we will explore the appropriate application of these different data collection methods and the advantages and disadvantages of each. In the subsequent section we will introduce you to exemplars of selected instruments that can be used to collect the data. You will select the most appropriate data collection method, depending on the objectives of and sample for the study.

Four of the main data collection methods are:

* Semi-structured interviews
* Focus group discussions
* Structured observations
* Simulated patient visits

Now read pages 24-42 in Hardon, Hodgkin and Fresle (2004) for information about the features of each of the data collection methods listed above, when they are most appropriately used, noting how to conduct each of them as well as their advantages and disadvantages.

**Reading**

Hardon, A., Hodgkin, C., & Fresle, D. (2004). Chapter 3: How to study medicines use in communities. How to Investigate the Use of Medicines by Consumers. Geneva: WHO & University of Amsterdam: 20-42.

<http://www.who.int/drugresistance/Manual2_HowtoImprove.pdf>

***Activity 3 – Identify the advantages and disadvantages of different data collection methods***

*Copy the table below which sets out of the advantages and disadvantages of the different data collection methods in your notebook; then complete it using information from the Hardon et al (2004) reading.*

|  |  |  |
| --- | --- | --- |
| **Data collection method** | **Advantages** | **Disadvantages** |
| Semi-structured interviews |  |  |
| Focus groups |  |  |
| Structured observations |  |  |
| Simulated patient visits |  |  |

**Feedback**

Compare your table with the one below:

|  |  |  |
| --- | --- | --- |
| **Data collection method** | **Advantages** | **Disadvantages** |
| **Interviews** | Enable flexible interaction which allows interviewer more opportunities to ask questions that arise  Permit observation of non-verbal expressions of respondents  Personal contact with respondent enhances better probing of issues that arise | Can be difficult to find or train good interviewers  Personal opinion of interviewer may influence interview |
| **Focus groups** | Allow interviewer to look for shared or differing perceptions of a problem in a group  Interviewer become a witness to a conversation amongst participants, which will yield more naturalistic data than a one on one interview  Greater pool of expertise is tapped than in individual interviews  Better way than individual interviewing to explore sensitive subjects in some cultures as participants will prompt each other | Depth of information may be limited since it is hard to probe individual ideas  Group consensus may inhibit original, unorthodox, or minority views  A few people may dominate the discussion  Success of a group discussion can be unpredictable |
| **Structured observations** | Enable behaviour to be recorded in context  Afford an opportunity to understand situational factors that influence behavior  Very helpful in validating data obtained by other methods  Verify what people do compared to what they say they do | Presence of an observer can affect the subjects' behaviour and thereby bias the data  Observer's bias in recording can affect the information obtained  A structured format may limit the type of information collected |
| **Simulated patient visits** | May provide more reliable information than interviews, that is, as experienced first-hand by data collector rather than self-report  Allows observation in natural context | Difficult to develop a lifelike simulation  Observation period is relatively short  Difficult to probe answers  Depth of information is limited |

**3.5 Selecting the right data collection method**

Note that it is important to carefully consider which data collection method is most appropriate for your study. This depends on the following sorts of considerations:

If the topic is sensitive, and the different participants do not belong to an existing group, you would probably use interviews, so that people are not forced to disclose something like HIV+ status to one another;

If the topic is to understand how community members value or regard injections, a group discussion where you are party to their diverse opinions, agreements and disagreements may be most effective;

If you wanted to observe the interactions of pharmacist and patient, observational methods would be the best choice;

If you wanted first hand experience of the interactions between health worker and patient, then simulated [patient visits would be appropriate. Often the best results are obtained by using more than one method (or triangulating your methods); the issues and topics explored with different methods will usually overlap or complement each other. The notion of triangulation comes from land surveying, in which relative points in space are determined by using other angles and reference points which are known; in qualitative research, the term triangulation refers to validating results by using two or more sources of data type, method or sample groups. Whichever data collection method you choose, before you launch ahead it is important that you think through the practicalities carefully, and make the necessary plans.

**3.6 Conducting semi-structured interviews**

A commonly used data collection method is the semi-structured interview. It is important to recognise that it is the semi-structured nature of the interview that enables you to follow a fairly open agenda, and to pursue points which arise during the interview in more detail. This is what enables you to learn new things about a topic: you do not strongly predetermine the direction of the interview.

***Activity 4 – Develop a checklist for conducting semi-structured interviews***

*Read Robson (2011) pages 399-406 (see below)*.

*As you read, develop a checklist of steps you would take if you were conducting a semi-structured interview with health professionals on anti-microbial usage for*

*diarrhoea.*

*Divide your steps into:*

*a. Preparation*

*b. Starting the interview*

*c. During the interview*

*d. After the interview*

*Remember that qualitative methods are also known as flexible methods. This implies flexibility of design. If after your intended number of interviews you still feel you have not gathered rich enough data, you could expand your sample, or use another method. This would not be possible with quantitative methods for which the design is fixed.*

**Reading**

Robson, C. (2011) *Real World Research*. Part IV: Carrying out the project: Arranging the practicalities. Chichester. Wiley: 399 – 406.

**Feedback**

Refer to section 3.7 below for feedback.

**3.7 Developing and applying an instrument to investigate a medicines use problem**

Developing an instrument - an interview schedule or guide - for a semi-structured interview takes a bit of practice. Critical considerations are the objectives of the study which guide you towards the kinds of questions you should be asking. It is really important not to bombard the participant with a whole lot of detailed questions as in a survey. You are instead looking for a way to open up a conversation. Then when the interviewee strays from the topic, you would guide them back; but in addition, you should have a series of prompts ready which will help you to probe the sub-topics further. Here we guide you through developing an instrument in a little more detail.

**3.7.1 A semi-structured interview schedule**

A semi-structured interview schedule is likely to include the following three sections: introductory comments, main content of interview and closing comments. It would usually be recorded, and then transcribed verbatim so that you can analyse the respondent’s own words.

|  |  |  |
| --- | --- | --- |
| **Introductory comments** | **Main content of interview** | **Closing comments** |
| You should commence the interview by introducing yourself, explaining the purpose of the interview, assuring confidentiality, asking permission to take notes and/or tape record the interview and then ask for consent form to be signed. | List of topic headings, key questions you want to ask and prompts to elicit further information. | Finish off by thanking the interviewee for their time and ask if any other final comments on the topic. |

Consider the following scenario:

*You are concerned about the high under-5 malaria mortality in your district; you think one of the reasons is because mothers or caregivers of children with malaria symptoms present late at clinics. You decide to conduct a qualitative study exploring the factors associated with late presentation of under-5 children with malaria symptoms at clinics in your district. Your key study population is mothers or caregivers of children who have had malaria in last 6 months.*

Below is an example of an interview schedule for a semi-structured interview with mothers in this scenario.

Remember that the prompts are there to remind you that you could ask these questions if the interviewee does not talk about them; but you do not want to lead the answers by saying for example: Are children most affected by malaria? The interviewee is likely to say “yes” or “no”, and you will not know whether they are simply being agreeable.

|  |
| --- |
| **Interview schedule for a semi-structured interview**  **Main content**   1. Topic: Assessment of knowledge and understanding of symptoms and treatment of malaria   Qu 1.1: What are the main symptoms of malaria?  Prompts: Did your child have fever, chills, headache, sweats, fatigue, nausea, vomiting?  Qu 1.2: Which categories of the population are most affected by malaria?  Prompts: children, pregnant women  Qu 1.3: What is the treatment for malaria?  Prompts: Do you know name of medicines? Do you know the dosage? How long is treatment? Do you need to finish course?   1. Topic: Assessing malaria control practices   Qu 2.1 What do people do to control the spread of malaria?  Prompts: mosquito nets (are they available, affordable), insecticide spraying (opinions about spraying), environmental measures   1. Topic: Assessing perceptions of health care provision at clinics   Qu 3.1: What do people do when they think their children may have malaria?  Prompts: consult family, friends, traditional healers, leaders, hospitals, clinics, other  Qu 3.2 What are your opinions about care of malaria at clinics?  Prompts: Is it accessible (opening times and distance); services received (staff attitudes, waiting time, availability of malaria tests and medicines), affordable (costs of consultation, laboratory and medicines)   1. Topic: Use of alternative treatments for fever by caregivers   Qu 4.1 What local treatments are used to treat malaria?  Prompts: herbs, other  Qu 4.2 Who usually recommends the treatment?  Prompts: family members, traditional healers, other   1. Topic: Speed of action when a child has a fever   Qu 5.1 When a child has a fever, what do you do?  Prompts: how soon do you do this?  Qu 5.2 What makes you decide to go to the clinic? |

You will notice that whereas structured interview questionnaires usually have a long list of mostly closed questions, this semi-structured interview guide has five main topic areas. Each topic has a couple of questions and each question a number of prompts.

**3.8 Conduct a semi-structured interview**

Now that you have been introduced to qualitative research we would like you to practise one of the data collection techniques - a semi-structured interview. As this is not part of a formal research study, and you do not have ethics approval, you will need to simulate this interview by asking a colleague at work or a friend to assist you. Remember that in a real research study, you would need to interview a number of respondents; here you are only asked to interview one, to practise the technique.

**Reading**

Hardon, A., Hodgkin, C., & Fresle, D. (2004). *How to Investigate the Use of Medicines by Consumers.* Chapter 3: How to study medicines use in communities. Geneva: WHO & University of Amsterdam: 25-28.

<http://www.who.int/drugresistance/Manual2_HowtoImprove.pdf>

***Activity 5 – Prepare for and conduct a semi-structured interview***

*Using the information on pages 25-28 of Hardon et al (2004), set up an interview with a colleague or friend who is a prescriber - a doctor or a nurse. Take note especially of Box 5 on page 25 of Hardon et al to remind yourself of the ground rules for conducting a good interview. The interview scenario is below.*

|  |
| --- |
| **Interview scenario**  **Topic**: Use of antibiotics to treat diarrhoea in children.  **Research problem**: Prescribers frequently use antibiotics to treat diarrhoea in children.  **Main research question**: What factors influence prescribers in their treatment of diarrhoea in children?  **Interview checklist**   1. Design an interview schedule (or list of question/s on which you would like the respondents’ views). Include sub-questions to prompt the respondent to get deeper responses to the main question. 2. Ideally you would record the interview and/or take notes during the interview. Here you should take notes, and record if possible. 3. Transcribe the first page of the interview if you have recorded it (optional). 4. Write a one-page summary report of the interview. This should summarise the key points you learnt from the interview using your notes. |

*Note: If possible, record the interview. If this is not possible, take notes (or ask another colleague to assist you by taking notes). Write a short summary report straight after the interview. If you have recorded the interview, you could transcribe the first page of it just to experience it.*

*As you collect your data, you would begin analysing it, which is the topic of the next section.*

*Submit copies of (a) and (d) by uploading to* ***the session 4 convenor’s folder,*** *by clicking on File Sharing (in e-Tools on iKamva – see iKamva guidelines).*

**Feedback**

The convenor will send you feedback on your interview schedule

**4 DATA ANALYSIS AND PRESENTATION**

After your data has been collected, the next step is to analyse and interpret it. Whereas in quantitative research this takes place after all the data has been collected, in qualitative research, analysis and interpretation starts at an earlier stage of the research. It is often iterative, as a series of data collections and analyses. However, planning your data analysis is an integral part of your study design. Qualitative studies yield large amounts of raw data, which could include field notes, observations, records of informal meetings, documents and your own reflections. It is important that these are labelled and stored so they are accessible for data analysis.

Qualitative data may be analysed using the “cut and arrange” or manual method, or an electronic computer package. In many situations, qualitative data is used to supplement or illustrate quantitative data on medicines use problems. However, there may be times when qualitative data forms the only, or a substantial part of a study which, for example, aims to describe medicines use behaviours. In this situation, it is usually necessary to use a software package and to ensure you have the assistance of someone with experience of qualitative data analysis. There are many computer packages designed for researchers to use when analysing qualitative data: these include NUD\*IST (Non-numerical, Unstructured Data Indexing, Searching and Theorizing), NVivo and Open Code. The latter is available free at: <http://www.phmed.umu.se/enheter/epidemiologi/forskning/open-code/> [Accessed 15 5 15].

Look at the presentation calledQualitative Data Analysis which highlights key points about the features and process of qualitative data analysis. It is important to recognise that when reporting findings of a qualitative study, we use verbatim quotations from the participants, which is why recording and transcription is critical.

Now read pages 69-71 in Hardon *et al* (2004) to see how these techniques can be applied specifically in medicines use problems.

**Reading**

Hardon, A., Hodgkin, C., & Fresle, D. (2004). *How to Investigate the Use of Medicines by Consumers*. Chapter 6: Data analysis. Geneva: WHO & University of Amsterdam: 69-71.

Finally, a note about reporting: reporting your findings is an important part of the research process. A well-written and well-presented report can ensure that your findings are useful, and that action can be taken in response to them. The appropriate format for a report depends on the nature and purpose of your research and the audience you are targeting. These could include formal technical reports for health departments, not-for-profit organisations or private companies; reports to community leaders or communities; or publications for academic journals.

**5 SESSION SUMMARY**

During this session, you have been introduced to some key points in conducting qualitative research, focusing on sample selection and data collection. You have also touched on analysis but not been given much guidance on reporting your findings. You will read more about this towards the end of the module, as communicating what you find is one of the crucial steps in making a difference in rational medicines use.

In conclusion, there are several key practical points to bear in mind when you are using qualitative methods to understand medicines use:

* Involve a social scientist or someone with expertise in qualitative methods at the planning phase. Most health workers will not become experts in conducting qualitative research and so bringing someone with experience will help to ensure rigour (good quality) for your study. The type of support required will depend on your previous experience, the size of the study and resources available.
* Include outliers (meaning unusual data sources and findings) whenever possible, as this will yield the most valuable information.
* Analyse your data as you are collecting it so that you can adjust your data collection as you proceed. Note this is very different from quantitative research where you use the data collection instruments and carry out data collection processes strictly in line with your agreed protocol.
* Use multiple methods and data sources to achieve triangulation. Most qualitative studies use multiple methods, for example, interviews, focus groups and observations.
* From the outset, set up a system to carefully document all interviews, focus groups, observations, etc. When a participant says something very pertinent, try to capture it verbatim, attribute it to that person's pseudonym, e.g. P1 and include it in your report.
* Take care not to collect more data than you can manage. Qualitative methods yield large quantities of written, and sometimes visual data, and this all needs to be analysed which takes considerable time.
* Do not over-rely on software for analysis. Whilst there is a place for software, it requires access and also expertise, and the same amount of deliberation as a manual process.

**6 REFERENCES AND FURTHER READINGS**

Cresswell, J.W. & Plano Clark, V.L. (n.d.). Principles of Qualitative Research: Designing A Qualitative Study PPT.

<http://community.csusm.edu/mod/resource/view.php?id=332>

Pope, C. & Mays, N. (1995). Qualitative Research: Reaching the Parts Other Methods Cannot Reach: An Introduction to Qualitative Methods in Health and Health Services Research. *British Medical Journal*, 311: 42-45. [Online], Available: h[ttp://www.bmj.com/cgi/content/full/311/6996/42](http://www.bmj.com/cgi/content/full/311/6996/42) [19/9/2000].

Pope, C., Ziebland, S. and Mays, N. (2000). Qualitative Research in Health Care: Analysing Qualitative Data. *British Medical Journal*, 320: 114-116.

Robson, C. (2011). *Real World Research*. Chichester: Wiley