



Key Area of Activity (KAA-10) 'Society, Culture and Health'



Focus group discussion with men in Dar es Salaam, Tanzania, about the use of health services during pregnancy and delivery (photo by C. Pfeiffer).

Focus group discussion with elderly participants about ageing, health and care in Tahuna (North Sulawesi), Indonesia. Wall posters state the FGD topic, objectives and questions (photo by P. van Eeuwijk).



How to ... Conduct a Focus Group Discussion (FGD)

Methodological Manual

By Peter van Eeuwijk and Zuzanna Angehrn

What is an FGD?

A Focus Group Discussion (FGD) is a qualitative research method and data collection technique in which a selected group of people discusses a given topic or issue in-depth, facilitated by a professional, external moderator. This method serves to solicit participants' attitudes and perceptions, knowledge and experiences, and practices, shared in the course of interaction with different people (see Table 1). The technique is based upon the assumption that the group processes activated during an FGD help to identify and clarify shared knowledge among groups and communities, which would otherwise be difficult to obtain with a series of individual interviews. Yet, this method does not presume that A) all the knowledge is shared equally among a studied group, or that B) in each community there is a common, underlying, homogeneous knowledge. Rather, an FGD allows the investigator to solicit both the participants' shared narrative as well as their differences in terms of experiences, opinions and worldviews during such 'open' discussion rounds.

	Focus Group Discussion (FGD)	Individual Qualitative Interview	Regular Meeting
Participants	Multiple participants who share one (some) common characteristic(s) that is (are) meaningful from the research perspective.	One individual interviewee who represents a very personal and distinct characteristic of importance from the research perspective.	Multiple participants who gather at the same place and have certain knowledge of the study subject.
Mode of Conduct	Semi-structured; carefully planned and cautiously executed.	Ranging from semi-structured to unstructured; well planned and executed.	Unstructured, without clear roles assigned to participants; no clear-cut scenario.
Scope of Insights	Often a large spectrum of opinions, notions and/or experiences; added focus on social interaction between participants.	Small spectrum of opinions, notions and/or experiences but provides deep individual insights.	Often a large but scattered spectrum of opinions, notions and/or experiences.
Level of Focus	High level of focus on the given topic(s).	Level of focus varies depending on the degree of structuring.	Level of focus largely uncontrollable.
Degree of Participation	When accurately and adequately moderated, all participants contribute equally to the discussion.	The whole interview is dedicated to the knowledge, attitudes, opinions and experiences of one person.	Usually, one or a few participants dominate and shape the discussion.

Table 1: Characteristics of different qualitative data collection techniques

Specific types of FGD groups:

- 'Natural groups': consist of multiple participants who belong to a pre-existing informal or formal group (e.g. family or kin, co-workers, elderly group, women's self-help group, neighbourhood club, teachers' credit association) prior to the study. Conducting a focus group discussion with a natural group may reveal discrepancies and similarities between what people say and how they act, and how other participants react and comment in response. However, the

researcher must be aware that power relations inherent to the group's social dynamics (e.g. doctor vs. nurse, parents vs. children, younger vs. older persons, men vs. women, better off vs. less well off), might influence participants' 'public' statements. Data analysis must account for this potential bias.

- 'Expert groups': consist of several people who have particularly good and broad expert knowledge and experience of the research topic(s). Such groups (e.g. nurses from health district centre, ambulance drivers, or drugstore vendors) tend to be smaller than typical FGDs and are used to solicit large amounts of highly specific information, although participant statements may vary.



Approaching gender balance in a focus group discussion with older women and men and a younger moderator (white shirt on the left) in Dar es Salaam, Tanzania (photo by J. Gerold).

Using FGDs in Health Research

In health research, FGDs can be applied to four different phases or stages of a scientific study, each with varying function, role and aim (Khan & Manderson 1992; Barbour 2006, 2014):

1. **Exploration:** At the beginning of an investigation, the researcher may perform an FGD to learn more about a given topic or field and to distil important preliminary issues regarding his/her study theme.
2. **Monitoring:** An FGD may be performed in the midst of on-going research activities to control or supervise the corresponding processes and dynamics (e.g. of a health intervention or a community survey) and to understand them better.
3. **Evaluation:** At the end or during the phasing-out stage of a research programme, an FGD with the main target group can be performed to verify, disprove, modify or differentiate the study's provisional finding.
4. **Gathering and assessing outcomes:** Some time after the completion of an investigation or intervention, an FGD may be performed to generate new findings about potential changes or processes within a target community or group and about their effect or impact on the field of health.

FGDs are used in studies that aim to understand health-related issues in a particular social, cultural, economic, ecological and political context (Barbour 2014). Because it focuses on group interaction and allows for data to be generated collectively, this method performs particularly well in identifying the following topics (among many others) (Wong 2008):

- How do people name, understand, experience and assess a disease, its symptoms and causes?
- How do people perceive and understand the link between risks, exposures and disease?
- How do they act on it?
- How do people distinguish their role in the health system?
- What is people's experience of interaction with health professionals?
- Why do people comply with or refuse to adhere to medical treatment or intervention?
- What are the specific health needs of particular groups?
- What are specific vulnerabilities of people in relation to illness?
- Which resources, capabilities and skills can a particular group or individuals develop regarding ill health and its treatment and concerning its mitigation and prevention?

The FGD technique makes use of the human ability to tell stories and is therefore particularly suitable in communities with a low level of literacy and/or a strong oral tradition (Grbich 1999, p.114 foll. Bromley et al. 2003:13). Moreover, it provides better access to people who are not outspoken and who would normally fear taking part in an individual interview, feeling that they have nothing to say or that they cannot address sensitive issues. Still, a researcher must be aware that FGDs tend to elicit opinions, attitudes and experiences that are shared 'only' normatively in a group

or community; individual voices that compromise and challenge the group's position might be silenced or go unheard.

It is not easy to state whether this technique is appropriate for exploring sensitive, personal or even intimate topics. On one hand, participants might hesitate or be ashamed to share very personal experiences or unpopular opinions if the FGD is conducted in a big open group. On the other hand, in a safe, non-threatening and conducive environment, some participants might be encouraged and empowered to overcome stigmas, discrimination or taboos in the presence of other people who have similar experiences (Kitzinger 1995, 2006).

How to Conduct an FGD

Formulating the Research Question and Drafting a Discussion Guide

Qualitative research is usually an explorative process and therefore flexible, iterative, reflective, non-predictable and contextualized (Silverman 2006). Unlike in quantitative studies, modifying the research question is possible and even recommended (but never during an active FGD session!) as is generating new hypotheses and pursuing new insights if the data suggest doing so. At the same time, a good, general and well-framed research question is essential to the success of a qualitative study.



Focus group discussion with traditional birth attendants in Dar es Salaam, Tanzania (photo by C. Pfeiffer).

It is critical to understand the difference between an overall research question and a question to be posed during an FGD discussion. The former obviously informs and shapes the latter, but there is no equivalence. A researcher cannot ask participants to provide an answer to the overall research question. On the contrary, it is his/her task to formulate appropriate, concrete and articulate questions (often: sub-question or discussion question) to ask participants, collect their responses, evaluate and compare them and finally interpret them in a way that makes it possible to answer the overarching research question (see Figure 1).

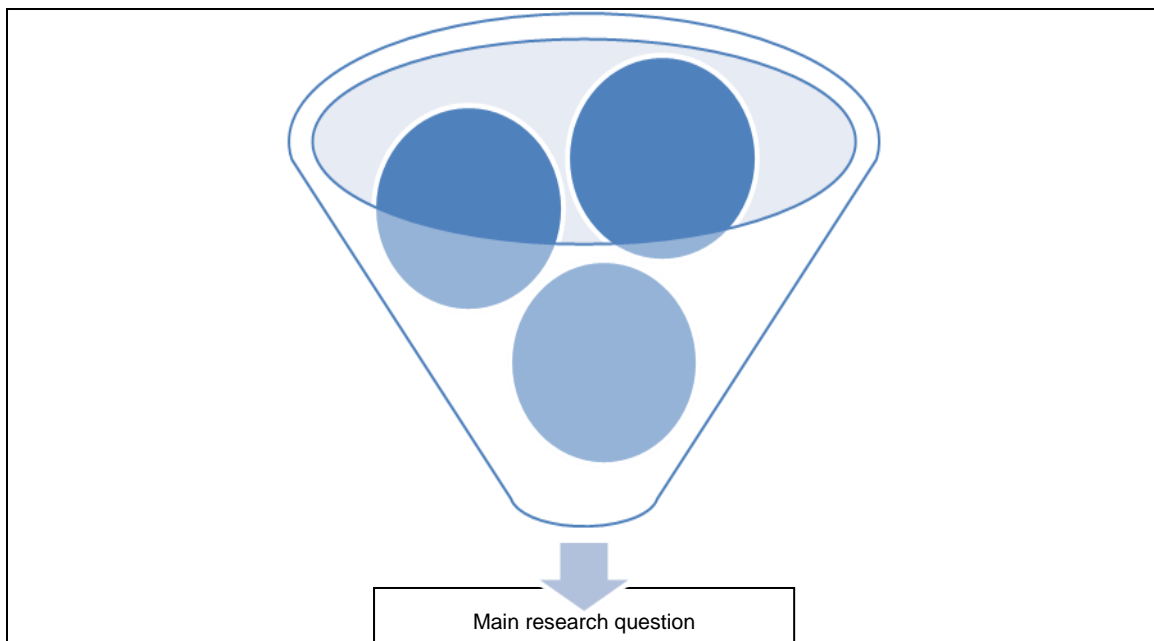


Figure 1: From concrete discussion questions (blue circles) to the principal research question

A short list (between 6 and 12 items) of concrete questions or discussion points is called 'an interview guide' for an FGD. Items may be derived from abstract models, concepts and theories or from the researcher's ideas, which are embedded in the overall research approach. Such workable and operationalizable questions should be open-ended, free of judgments, inoffensive, comprehensible, justifiable, and not rhetorical.

Operational Planning

Operational planning for an FGD includes (Dawson, Manderson, and Tallo 1993):

- ✓ Preparing and developing protocols and informed consent forms.
- ✓ Obtaining official approval of an ethical committee (if required) and/or, in some contexts, non-official consent from corresponding institution (e.g. from hospital, school, association) or local community (e.g. through head of village, district officer).
- ✓ Training and instructing assisting staff (e.g. moderator, minute taker, and observer).
- ✓ Planning time and place of an interview and arranging a venue that allows for a relaxed, safe and comfortable interaction, possibly at a round table.
- ✓ Arranging and testing technical recording equipment (video/audio incl. batteries).
- ✓ Planning recruitment and reimbursement of participants (e.g. for transport, food and/or loss of income – but not in the sense of payment/salary).

Sampling and Recruitment

In qualitative studies, such as in FGDs, sampling is guided by fundamentally different principles than in quantitative surveys. Absolute representativeness is neither an ultimate goal nor an outright distinction in qualitative science, and validity of data and

results is obtained through different means (e.g. by methodological triangulation, systematic analysis).

Participants are typically selected to participate in qualitative research based on transparent criteria, such as their knowledge, life-experience, particular characteristics or role in a group/community (Khan & Manderson 1992). This approach to sampling is called 'purposive'. Nevertheless, 'random' sampling is also possible (though not often applied in FGDs), where the researcher assembles a bigger group of more or less similar people.

The typical size of a focus group discussion is 6 to 12 participants; however, smaller groups are also fine and informative, giving all participants enough time and opportunity to share. A group of only 3 to 4 participants is called a 'mini group'. A general rule of the thumb is that the more experience and knowledge the participants have on the given subject, the smaller the group could be.



Focus group discussion with village leaders and voluntary village workers in Saravan Province, Laos, about risks, experiences and requests regarding trematode diseases. Moderator, minute taker and observer (in the foreground) are state health professionals.

Two approaches are used to compose groups: A) sufficient homogeneity to facilitate comparison between groups, and B) sufficient diversity within groups (Khan & Manderson 1992; Barbour 2005). The first approach seeks to encourage a sense of well-being among participants and to reach some consensus on the subject. The second approach proposes that bringing together people with various roles, differing experiences and diverse backgrounds might yield unexpected, varying and broad-ranging, yet robust and meaningful results. The researcher has to judge for him-/herself which strategy will best serve a particular research topic. Nevertheless, sensitive issues (e.g. sexual and reproductive health, family planning, gender inequality in health, addiction, disability or mental illness) are best discussed in separated sub-groups. For example, a sub-group exclusive to women and one exclusive to men, or three to four different sub-groups according to life-cycle stage, or a sub-group for medical professionals and one for non-medical professionals, or compliant and non-compliant patients, etc. In some cases, FGD participants are asked to share personal data to facilitate the subsequent analysis of their statements. In such circumstances, small, uniform groups that encourage trust and mutual understanding are desired.

The number of FGDs to hold depends on the type and complexity of the research topic. FGDs should generate sufficient data to allow for comparisons and to generate and test theoretical ideas (Barbour 2005). For this purpose, the concept of 'saturation' can be helpful in many studies. Reaching saturation means reaching a point where subsequent group discussions no longer provide new insights or outcomes. Saturation is a clear indication that data collection can come to an end

and is only possible when data collection and interpretation take place iteratively (Carlsen and Glenton 2011); that is, when the researcher reviews and thus knows the data collected and can assess/evaluate them for completeness and sufficiency.



The role of the moderator (left, white shirt) in a focus group discussion is crucial – here with older women and men in Dar es Salaam, Tanzania (photo by J. Gerold).

Conduct

The quality of an FGD depends on the experience and skills of the moderator, who needs to be capable of “thinking, listening and managing time at the same time” (Lewis 2003). His/her role is to ensure that the discussion topic is clearly introduced and thoroughly addressed, and that the discussion is balanced and inclusive. Despite this crucial role, the moderator should avoid dominating the group and expressing his/her own judgments. Instead, he/she should be open, alert, probing and encourage everyone to take part in the discussion. Ideally, the moderator should be able to establish a group dynamic in which participants discuss topics from the discussion guide among themselves, rather than relying on the moderator to address and interview participants, one by one (Silverman 2006).

A typical FGD proceeds as follows (Dawson, Manderson, and Tallo 1993):

- Start the discussion with an ‘ice-breaker’, e.g. a round of introduction of participants.
- Introduce the main topic and the overall research question (e.g. orally, on a poster or as a projected presentation).
- Ask specific questions listed in the discussion guide (not necessarily in the pre-specified order); a skilled moderator will be able to ensure that all important questions (which may be photocopied and distributed to the participants) are covered, without interrupting the natural flow of the discussion.
- Thank participants and say good-bye.

The role of a moderator is very demanding; it is almost impossible for him/her to take detailed minutes. A video or audio recording of the session is helpful and a standard way of documenting an FGD – but it requires formal agreement from all participants. It is advisable to enlist a minute taker to write down the most important points made by participants, along with any other ideas or analytical thoughts that come to mind

during or right after the discussion. Some FGDs also employ an observer to monitor the social dynamics between the participants when they discuss particular questions. FGDs may last long, from one to even several hours. It is possible to incorporate group exercises (e.g. discussing a realistic case or a provocative hypothesis) and projective techniques (i.e. relatively indefinite and unstructured stimuli are provided to the participants who are asked to structure them in any way they like, which unconsciously projects their own desires, expectations, hopes, fears, and/or repressed wishes) into the course of the discussion, if appropriate for the research topic.



Focus group discussion with two sub-groups of older women in Tomohon (North Sulawesi), Indonesia, about body, health and care. Moderator plays an active role in stimulating discussion. Wall poster contains FGD questions (photo by P. van Eeuwijk).

Analysis

A concrete question asked during the discussion is not the same as the overall research question. Likewise, what participants say is not equivalent to answering the research question. Before answering the research question, a researcher needs to analyze and interpret the data collected from the FGDs. The analysis of qualitative data is difficult and very time consuming, therefore be sure to reserve enough time for this task. Spending time to conceptualize the entire study process before data collection starts will make it easier to interpret the results later on.

Data analysis typically consists of several phases:

1. **Transcribing recorded statements** so that a detailed, written document is available about who said what about a particular question. Transcription of one group discussion takes several hours and generates many pages of text.
2. **Coding the transcription** using 'codes' (and corresponding 'sub-codes' leading to a 'code path' or 'code tree'). Codes are 'labels' that summarize or bookmark short fragments of text, and therefore help to sort and structure the data. Several procedures can be used to establish these codes, and it is possible to include different types of codes in one analysis:
 - a. Deductive codes – those specified before data collection, based on the research question; the Framework Method (Gale et al. 2013) is a valuable and frequently used example.
 - b. Inductive codes – those that emerge from the analyzed text itself, as in Grounded Theory (Charmaz 2006).
 - c. Codes referring to the group dynamic, which later help to understand how a group opinion was established in the course of interaction, e.g.

‘opposing’, ‘agreeing’, ‘deferring to the opinion of others’, ‘silencing’ or ‘changing mind’ (Barbour 2014).

3. **Reviewing memos** produced by the researcher and other members of the research team during the course of the study. Such memos often contain reflections on the process of data collection or insights into the research problem. The reality is that qualitative data analysis often begins in the field, because a researcher – exposed to data while collecting them – cannot and should not attempt to refrain from understanding and pre-interpreting data (Pope, Ziebland, and Mays 2000). Such ‘interim analysis’ is one of the strengths of qualitative research, which allows for refining the research question and instruments when pre-interpreted data suggest the need for it.
4. **Analyzing and interpreting qualitative data**, typically through a two-step approach (Silverman 2006; Wong 2008):
 - a. First, look at what people in the group literally said, remembering that the group, rather than the individual, is the unit of analysis. This part is rather simple and descriptive. A researcher performing this initial step of the analysis will report that, for example, “the consensus achieved by the group was ...”, “the majority of participants agreed that ...”, “there were several contradictory opinions about ...”, “almost no one mentioned ...”. Please note, however, that quantifying findings, although feasible, does not usually add value to scientific research by means of FGDs.
 - b. Second, interpret what people said in an integrated, theoretical way. This often relies on:
 - i. mapping a problem
 - ii. identifying patterns, regularities and themes
 - iii. identifying differences and similarities within the data and between different sources of data
 - iv. making comparisons between different groups involved in the topic (Bromley et al. 2003)
5. **Establishing validity and reliability** through consensus, coherence, triangulation and reflexivity.

Conducting a respondent check is a useful first step towards validating the results. It requires presenting the findings to the discussion participants or to the community (Bromley et al. 2003:16). It does not require that participants support all results and conclusions made by the researcher (and vice versa), but respondent validation can strengthen or weaken the level of trust in the results, and might bring about new insights and motivate the researcher to refine or modify his/her findings.

To successfully establish the reliability of qualitative findings, the researcher is expected to actively think about how his/her own social, economic, ethnic, religious, cultural, personal and scientific background might influence the chosen scientific approach and mode of interpretation.

Finally, contrast qualitative FGD results with findings from other techniques used in the same or similar study, or with another data source, such as literature review. This is called ‘triangulation’ or ‘cross-validation’ (for instance, through the application of interview, observation, self-reporting and/or meta-analysis).

Software Supporting Qualitative Data Analysis

There are two types of software that facilitate qualitative analyses

- Programs that facilitate transcription, such as Transcriber (<http://transaq.sourceforge.net/>, audio only, freeware) and Transana (<http://www.transana.org/>, video and audio, to be purchased).
- Programs that facilitate coding and interpretation, such as MaxQDA, AtlasTI, QDA Miner (all require purchasing a license).

Publication and Dissemination of Results

The results of qualitative studies may be published in most health (system) research, public health and epidemiology journals. As in the case of clinical trials and observational studies, reporting a qualitative study must comply with fixed quality standards that enhance rigor and comparability. Two widely used checklists are:

- COREQ (Consolidated Criteria for Reporting Qualitative Studies) (Tong, Sainsbury, and Craig 2007).
- RATS (Qualitative Research Review Guidelines) used by Springer and Biomed Central <https://old.biomedcentral.com/authors/rats>.

It is always a good idea to check which reporting standard is preferred by the journal of interest before drafting the manuscript. Better still is to carefully read the reporting guidelines even before the study is conducted. This way a researcher can turn reporting guidelines into a roadmap for research before initiating and ensure that all important steps and procedures are followed.

Finally, it is good practice and respectful to disseminate the research results among the community that assisted and supported the study. Researchers might want to write a brief and accessible paper summarizing the findings and results, make it available to participants and the community and ask for comments, or schedule a community dissemination meeting, which may take the form of an FGD.

Researchers have to assure confidentiality during the course of disseminating provisional findings. This includes securing access to data storage (i.e. at least password-protected), preferably limiting access to only a few researchers for a fixed amount of time (which depends on the overall duration of the research). It is advisable that the principal investigator/head of project stores one copy of the collected FGD data in a way that makes it possible to retrieve specific data in the future. In general, most safety and confidentiality issues are regulated through an existing ethical clearance.

How to Incorporate an FGD into a Wider Study

FGDs are often part of a bigger research project that also includes other data collection techniques (quantitative, other qualitative, or mixed methods approaches). FGDs can be combined with, for example, surveys and might then serve as a method to (Dawson, Manderson, and Tallo 1993):

- generate sets of pre-specified, valid and comprehensive responses to survey questions
- validate survey questionnaires
- validate the results obtained from a qualitative survey



An active and attentive moderator (white shirt on the left) facilitates a focus group discussion about health care and agency with older women and men in Dar es Salaam, Tanzania (photo by J. Gerold).

Additional Considerations

FGDs with Culturally and Linguistically Diverse Communities

Conducting research in communities that are culturally different than the researcher's culture of origin is a challenge. Besides the obvious difficulty in communicating in a foreign language, or via an interpreter, a researcher might also experience a frustration stemming from a poor understanding of norms, values, roles, communication patterns, public practices and power relations in the community from which the FGD participants are recruited (Halcomb et al. 2007). All these factors might substantially influence the dynamics of a discussion and subsequently its results. Thus, there is a need for cultural sensitivity and social competency in the research team, which can be achieved, for example, by engaging members of the local study group/community early on. Involving (e.g. in preparing an FGD) bilingual interpreters, local village health workers or patients, and scientists might greatly enhance mutual trust and understanding as well as the will for collaboration (Barbour 2005). Another good practice is to devote enough time to familiarizing yourself with and adapting to the local culture and the community in situ well before the study begins.

Ethical Aspects

As in any other type of scientific research conducted on people and health, the researcher has to guarantee to protect the integrity of participants. This means ensuring that participation in the FGD does not bring any physical, mental, emotional, social or economic harm to any of the participants or related third parties (e.g. family, kin, neighbours, friends) – or to the researcher – and that their statements are held confidentially (unless specified otherwise) and saved in a secured place. Transcripts can be published only in fragments and after undergoing a process of strict anonymization (unless consent otherwise granted). The moderator must never mislead, deceive or misguide participants.

Before proceeding with data collection, it is mandatory to obtain informed consent that is signed by the FGD participants; this requirement is usually part of the study approval issued by an ethics advisory board. In general, personal data collected during an FGD are subject to relevant and current data protection laws to the same extent as other personal and biomedical data collected for research.

Contact

Peter van Eeuwijk: peter.vaneeuwijk@swisstph.ch

Literature

- Barbour, Rosaline S. 2005. "Making Sense of Focus Groups." *Medical Education* 39: 742–750.
- . 2014. "Analyzing Focus Groups." In *The SAGE Handbook of Qualitative Data Analysis*, ed. Uwe Flick. London: SAGE Publications, 313–326.
- Bromley, Helene et al. 2003. *Glossary of Qualitative Research Terms*. London: King's College, University of London.
- Carlsen, Benedicte, and Claire Glenton. 2011. "What about N? A Methodological Study of Sample-Size Reporting in Focus Group Studies." *BMC Medical Research Methodology* 11(1): 26. <http://www.biomedcentral.com/1471-2288/11/26>.
- Charmaz, Kathy. 2006. *Constructing Grounded Theory: A Practical Guide through Qualitative Research*. London, Thousand Oaks, New Delhi: SAGE Publications.
- Dawson, Susan, Lenore Manderson, and Veronica L. Tallo. 1993. *A Manual for the Use of Focus Groups*. Boston: International Nutrition Foundation for Developing Countries (INFDC).
- Gale, Nicola K. et al. 2013. "Using the Framework Method for the Analysis of Qualitative Data in Multi-Disciplinary Health Research." *BMC Medical Research Methodology* 13(1): 117.
- Halcomb, Elizabeth J. et al. 2007. "Literature Review: Considerations in Undertaking Focus Group Research with Culturally and Linguistically Diverse Groups." *Journal of Clinical Nursing* 16(6): 1000–1011. <http://doi.wiley.com/10.1111/j.1365-2702.2006.01760.x>.
- Khan, Me, and Lenore Manderson. 1992. "Focus Groups in Tropical Diseases Research." *Health Policy and Planning* 7(1): 56–66.
- Kitzinger, Jenny. 1995. "Introducing Focus Groups." *British Medical Journal* 311: 299–302.
- . 2006. "Focus Groups." In *Qualitative Research in Health Care*, eds. Catherine Pope and Nicholas Mays. Malden, Oxford, Carlton: Blackwell Publishing, 21–30.
- Lewis, Melinda. 2003. *Focus Group Interviews in Qualitative Research: A Review of Literature*. Sydney. <http://www.aral.com.au/arow/rlewis.html>
- Pope, Catherine, Sue Ziebland, and Nicholas Mays. 2000. "Qualitative Research in Health Care: Analysing Qualitative Data." *British Medical Journal* 320: 114–116. <http://www.bmj.com/cgi/doi/10.1136/bmj.320.7227.114>.
- Silverman, David. 2006. *Interpreting Qualitative Data* (3rd Edition). London: SAGE Publications.

Tong, Allison, Peter Sainsbury, and Jonathan Craig. 2007. "Consolidated Criteria for Reporting Qualitative Research (COREQ): A 32-Item Checklist for Interviews and Focus Groups." *International Journal for Quality in Health Care* 19(6): 349–357.

Wong, Li Ping. 2008. "Focus Group Discussion: A Tool for Health and Medical Research." *Singapore Medical Journal* 49(3): 256–260.

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