

Article

## Managing Ethical Problems in Qualitative Research Involving Vulnerable Populations, Using a Pilot Study

Evalina van Wijk, RN, PhD  
Senior Lecturer  
Western Cape College of Nursing  
Cape Town, South Africa

Tracie Harrison, RN, FNP  
Associate Professor  
School of Nursing  
The University of Texas at Austin  
Austin, Texas, United States

© 2013 van Wijk and Harrison.

---

### Abstract

The purpose of the researcher's study was to examine the meaning that intimate partners of female rape victims attached to their lived experiences after the rape. The conduct of qualitative research concerning non-offending partners of female rape victims, however, often involves multifaceted ethical and practical challenges, which can be managed through the use of pilot studies. The pilot study described in this report had three objectives. The first was to pretest and refine the proposed method for locating, accessing, and recruiting intimate partners of female rape victims, within the first two weeks after the rape, for participation in a six-month longitudinal study. The second objective was to identify and prevent all possible risk factors in the proposed recruitment and data collection methods that could harm the participants' safety during the main study. The third objective was to determine the feasibility of the main study, in terms of the limited financial and human resources available. The pilot phase was valuable in identifying ethical and methodological problems during the recruitment of participants and collection of data. It allowed for methodological adjustments prior to the main study and confirmed the feasibility of the overall research design. A pilot, pretesting phase is therefore seen as an essential component of a qualitative study involving a vulnerable population.

**Keywords:** pilot study, longitudinal study, ethical and practical challenges, intimate partners, rape victims, vulnerable population

**Author Note:** The research, authorship, and publication of this article was partially funded by the African Doctoral Dissertation Research Fellowship award offered by the African Population and Health Research Centre (APHRC) in partnership with the International Development Research Centre (IDRC) and also partially funded by a bursary from the Margaret McNamara Research Foundation.

The conduct of research involving intimate partners of female rape victims raises ethical and practical challenges for the researcher, such as recruitment and retention, confidentiality, and the protection of vulnerable participants. These challenges can be managed through the use of pilot studies (Campbell & Wasco, 2005; Duma, Khanyil, & Daniels, 2009). Performing a pilot study and putting specific mechanisms in place to safeguard the ethical and human rights of potential participants may prevent the risk of physical and emotional harm during both the pilot study and the main study (Ellsberg & Heise, 2005; Sullivan & Cain, 2004).

The intimate partners of raped women often suffer distress and so it is suggested that they be categorized as a vulnerable population. According to Rogers (1997), the term “vulnerability” means to possess a degree of “susceptibility to health problems, harm or neglect” due to a level of perceived threat (p. 65). When intimate partners are involved in research related to the rape of someone they care for, this experience may cause a secondary victimization risk due to the sensitive and intrusive nature of the research questions asked. Alternatively, if an intimate partner is questioned too soon after the rape, the questioning can cause a reliving of the rape of his or her partner. The patriarchal nature of the health system has the potential to place coercive pressure on intimate partners to become involved in a study that actually might be perceived as a threat that could unduly create or reopen a wound (Davis, Taylor, & Bench, 1995; Sullivan & Cain, 2004).

The ethical protection of subjects was the overriding concern for the researcher, the first author of this article, when formulating the objectives for the pilot study described here. First, this entailed identifying the most appropriate method for locating, contacting, and recruiting intimate partners of female rape victims, within the first two weeks after the rape, for participation in a six-month longitudinal study. The second objective was to identify and avoid risk factors in the proposed recruitment and data collection methods that could harm the participants’ safety during the main study. The third objective was to determine the feasibility of the main study, in terms of the limited financial and human resources available. This article draws on the experience gained from the pilot study and it aims to demonstrate how unanticipated ethical and methodological problems were identified, processed, and overcome.

### **Background and Motivation for Conducting the Pilot Study**

The need to conduct a pilot study prior to the main study became apparent during the proposal development stage for a doctoral study by the researcher. From the outset it was clear that an examination of the lived experiences of intimate partners of female rape victims in Cape Town, South Africa, over time, would entail a longitudinal qualitative study of at least six months after the rape. Duma (2006), in studying women’s journeys of recovery after rape, found that some of the recruitment strategies described in the international literature on research into sexual violence involving women had never been used in the South African context. She conducted a pilot study to prevent any possible violation of the participants’ ethical and human rights during the main study.

In the study described in this article, the intimate partners were regarded as a vulnerable population because they were traumatized not only by the rape occurrence but also by the subsequent episodes of secondary victimization at the police stations and health facilities (Van Wijk, 2011). Some partners had even witnessed the rape. Because of their vulnerability, it was deemed important to first conduct a pilot study with particular emphasis on the protection of the participants’ ethical and human rights in order to entrench these in the main study.

The methods used by Davis and colleagues (1995), in their longitudinal study of intimate partners, have not previously been used in South Africa. The note of caution expressed by Duma

and colleagues (2009), therefore, further convinced the researcher to conduct a pilot study to ensure ethical practices in a different cultural environment. The recommendations of Watson, Atkinson, and Rose (2007) and Kilanowski (2006) about the benefits of pilot studies reinforced this intention.

This article provides a discussion of the practical challenges identified throughout the pilot study and it attempts to emphasize the significance of ethical considerations at all stages of the research process. Some key issues for consideration when conducting pilot studies with vulnerable populations are highlighted.

### **Literature Review**

A review of the literature in the field of sexual violence revealed numerous potential ethical, legal, and practical problems in research involving vulnerable populations. A brief discussion of these issues is given below. The different categories and purposes of pilot studies are also examined.

A fundamental principle of ethical research is to protect the rights and welfare of those who volunteer to participate by putting mechanisms in place to safeguard them and to prevent possible violation of their ethical and human rights (Edwards & Mauthner, 2002; Munro, Holmes, & Ward, 2005; Sullivan & Cain, 2004). Regrettably, despite precautions to safeguard the participants' safety, ethical and legal dilemmas may occur at all stages of the research; this is particularly true for research involving vulnerable populations (Connolly, 2003; Strydom, 2005a). Polit and Beck (2004) referred to vulnerable subjects as a special group of people whose rights in research studies need special protection because their circumstances place them at higher than average risk of adverse outcomes and of susceptibility to coercive pressures.

In South Africa, the Department of Health has clear guidelines for the protection of vulnerable groups (National Health Research Ethics Council, 2011). Moreover, the *Declaration of Helsinki* of the World Medical Association (2008) frames vulnerability both in terms of examples (e.g., economically disadvantaged, patients in care) and in terms of criteria (e.g., cannot give consent, refuses consent, pressured to give consent, those who will not benefit personally from research). Therefore, research proposals need to go before ethics committees for adjudication to ensure appropriate levels of accountability and provision for responsibility (Clayton, 2009; Sherlock & Thynne, 2010). The current study was duly approved by the relevant university research ethics committee.

Apart from the general ethical principles involving human subjects in clinical practice, research with vulnerable populations appears more challenging because there are specific ethical issues to consider when safeguarding the participants' safety. These, as identified by various authors, include:

Table 1

*Specific Ethical Issues for Safeguarding Safety of Vulnerable Populations*

Specific ethical issue	Author(s)
Recognizing issues of respect, fairness, and dignity for all those who are involved in, or affected by, the research	Connolly, 2003, pp. 9, 27 Sullivan & Cain, 2004, p. 603
Providing a thorough description of the research process so that potential participants have the information needed to make an informed, voluntary consent	Connolly, 2003, pp. 14-15 Cottingham & Jansen, 2005, p. 4 Duma, Khanyil, & Daniels, 2009, p. 53
Ensuring participants' safety	Cottingham & Jansen, 2005, p. 3 Duma, Khanyil, & Daniels, 2009, p. 53
Avoiding unnecessary suffering	Connolly, 2003, p. 31 Duma, Khanyil, & Daniels, 2009, p. 54 Meltzoff, 2005, p. 311 Van Teijlingen & Hundley, 2001, p. 295
Honouring and maintaining anonymity, confidentiality, and privacy	Connolly, 2003, p. 31 Duma, Khanyil, & Daniels, 2009, p. 53 Ellsberg & Heise, 2005, p. 35
Ensuring beneficence, by minimizing risks and maximizing benefits of a study	Connolly, 2003, p. 23 Duma, Khanyil, & Daniels, 2009, p. 53
Respecting the right to withdraw from the research at any time	Connolly, 2003, p. 30 Gubrium & Holstein, 2001, p. 76 Packer & Addison, 1989, p. 43

In particular, precautions should be taken to avoid inadvertent reinforcement of negative social stereotypes concerning particular groups, unfair exploitation of vulnerable research participants, and the causing of distress to people who have suffered traumatic events (Flaskerud & Winslow, 1998; Sullivan & Cain, 2004).

If researchers fail to protect the physical and psychological well-being of their participants, it can result in distressing ethical misfortunes (Duma et al., 2009). Furthermore, before conducting research with individuals who have experienced traumatic events, researchers should provide arrangements for supports, if needed, during and after the research (Connolly, 2003). Researchers and participants can become emotionally affected by the devastating impact of rape (Campbell & Wasco, 2005; Cottingham & Jansen, 2005; Duma, 2006; Sullivan & Cain, 2004). In such circumstances, appropriate support mechanisms should be made available for researchers and participants alike, including debriefing sessions and the opportunity to meet with a counselor (Connolly, 2003, p.27).

To ensure that recruitment and the actual research involving vulnerable populations are conducted in an ethical and safe manner, researchers recommend the following:

Table 2

*Specific Issues for Ethical and Safe Recruitment and Research with Vulnerable Populations*

Specific issue	Author(s)
Ensure that information about the research is communicated in a way that is meaningful to the individuals concerned.	Aitken, Gallagher, & Madronio, 2003, pp. 340-341 Connolly, 2003, p. 30 Wadensjö, 2004, p. 113
Where possible and appropriate, written as well as verbal consent should be gained.	Connolly, 2003, p. 30
Inform participants prior to the commencement of the research of the sensitive nature of the questions to be asked during interviews, as well as the procedures thereof, which would guarantee their confidentiality, anonymity, and privacy.	Connolly, 2003, pp. 20-21 Duma, Khanyil, & Daniels, 2009, p. 53 Ellsberg & Heise, 2005, p. 35
There is a need for sensitivity concerning cultural differences that may exist between the researcher and the participants.	Bot, 2005, pp. 176-179 Bronsdijk, 2006, p. 4 Duma, Khanyil, & Daniels, 2009, p. 53 Gerrish, Chau, Sobowale, & Birks, 2004, p. 407 Milectic et al., 2006, p. 3
If an interpreter is involved, he or she should have knowledge of a participant's cultural background and should speak the same dialect as that person. Additionally, the interpreter should receive training on the documents, topic, background, objectives and purpose of the study, length of the interviews, and procedures for maintaining confidentiality.	Bot, 2005, pp. 176-179 Bronsdijk, 2006, p. 4 Gerrish, Chau, Sobowale, & Birks, 2004, p. 407 Hsieh, 2007, pp. 410-415 Milectic et al., 2006, p. 3 Temple & Edwards, 2002, p. 2
Strategies should be put in place to deal with participants' immediate and ongoing emotional needs, and where necessary, referrals should be made to crisis support services.	Connolly, 2003, p. 34
Since recruitment of vulnerable research participants is a complex task, locating and contacting them in longitudinal studies should be done without endangering their safety.	Duma, Khanyil, & Daniels, 2009, pp. 56-57
Interviews should be conducted in private and safe settings.	Connolly, 2003, p. 34

A naturalistic paradigm of inquiry requires that participants should be located and interviewed in their own living space. In the context of the study in question, this was regarded as an unsafe strategy for intimate partners when their female partners were raped in or near their homes in informal, densely populated, peri-urban shanty town settlements. All the participants gave consent for the researcher to visit them at their homes; however, they requested that she not wear a uniform or identification card because there was always a possibility that the perpetrators might be from the same area. If a researcher visited the home, he or she could be viewed as part of the police investigating team, which could potentially compromise the physical safety of both the participant and the researcher. The study methodology should, therefore, be refined to ensure that

participant and researcher anonymity and confidentiality are safeguarded during all phases of the study (Duma et al., 2009; Van Wijk, 2011).

Similarly, when researchers make telephone calls for recruitment or for other purposes during the study, they may need to consider certain rules to protect the participants' confidentiality. For example, they should first ask if it is suitable for the researcher to call the participant's home and ask for him or her, and then they should ask what would be best if someone other than the participant answers the phone. Sullivan and Cain (2004), for example, have recommended that the researcher begin by asking for the participant by name. Moreover, the researcher should never assume that the person on the line is the participant, and if the participant does not answer the call, the researcher may be asked to pretend that he or she has dialed an incorrect number. Finally, when giving consent for participation, the participant should be asked to verify with persons whose telephone numbers are provided as alternative contacts that they are aware they may be contacted in the event that the participant is not reachable. These procedural precautions should be implemented and tested when conducting a pilot study (Duma et al., 2009; Van Wijk, 2011).

### **Compensation Versus Coercion**

Although reimbursing participants in research studies for their time and travel expenses is a well-recognized principle, Horn (2008) stated that the payment of clinical trial participants is contentious, particularly in the developing world. Some ethical committees regard the payment of money as an apparent inducement to participate in a study and as being unacceptable, because the money may influence the participant's autonomy and ability to consent freely to participate; in other words, it could be viewed as a form of coercion to participate. Some writers also regard financial incentives to encourage research participation in longitudinal studies as coercive; this view applies in particular to poor people (McKenzie, Tulskey, Long, Chesney, & Moss, 1999; Moore, 1997; Rudy, Estok, Kerr, & Menzel, 1994). Others, however, maintain that money is a justifiable incentive to encourage participation in research projects. Moreover, reimbursing participants for their transport costs is acceptable as long as the researcher discusses the reimbursement with the participants before they consent to participating in a study (Aitken, Gallagher, & Madronio, 2003; Cooley et al., 2003; DiMattio, 2001; Gross & Fogg, 2001; Gross, Julion, & Fogg, 2001; Lyons et al., 2004).

Deciding on an appropriate and fair amount may be difficult (McKenzie et al., 1999; Ribisl et al., 1996). In the current pilot study, the researcher estimated a fair reimbursement for the participants' travelling costs and for their time, without introducing coercive pressures.

### **Categories of Pilot Studies in Qualitative and Quantitative Research**

Ideally, both qualitative and quantitative researchers should conduct a pilot study before the main study and it should be executed in the same manner as the main study (De Vos, Strydom, Fouche, & Delport, 2005). By conducting a pilot study, researchers can enhance the probability of successfully completing the main study by identifying and avoiding mistakes that could otherwise ruin the main study, such as not protecting participants' anonymity and confidentiality or not addressing queries regarding ethical considerations, proposed research design, logistics, recruitment, and sampling (Thabane et al., 2010).

Duma et al. (2009) and Van Teijlingen and Hundley (2002) pointed out that there are a number of opposing opinions on the definitions of pilot studies. Also, there are different categories and functions of pilot studies in qualitative research. Bless and Higson-Smith (2000) contended that a pilot study is a small-scale trial run that is conducted prior to a larger piece of research. Pilot

studies, often commonly known as “feasibility,” “vanguard,” or “preliminary exploratory” studies, have several uses in qualitative and quantitative research (Strydom, 2005b). Such studies should be designed as a trial run to be tested on a small number of persons with the same characteristics as those of the target group.

Various authors have written about the purposes of pilot studies (Duma et al., 2009; Kilanowski, 2006; Thabane et al., 2010; Van Teijlingen & Hundley, 2002; Watson, Atkinson, & Rose, 2007). These purposes include:

- Identify and prevent all possible risk factors, or research activities, that can be harmful to the participant.
- Identify problems that may arise during the interviews in the main study.
- Convince the relevant stakeholders, including funding bodies, that the main study is feasible and worth supporting/funding.
- Refine the research question and research plan.
- Address queries regarding ethical considerations, proposed research design, logistics, recruitment, and sampling.
- Ensure that data collection methods and instruments, and data analysis methodology, are adequate and appropriate.
- Improve the quality and efficiency of the main study.
- Enable the researcher to engage in conducting a preliminary data analysis in order to see whether the methodology is appropriate and to make modifications where necessary.
- Test the nature of the questions in order to make any modifications needed to ensure a good standard of interviewing during the main study.
- Get an overview of the actual situation where the planned investigation will be executed.
- Come to grips with some of the practical aspects of establishing access, making contact, and conducting the interviews; as part of this process, interviewers may gain insight into their interviewing skills, or lack thereof.
- Determine whether the main study will be feasible in terms of the allocated financial and human resources.
- Enable the researcher to form an opinion of the openness of the respondents and their willingness to cooperate, and also to get an idea of the number of respondents likely to be involved until data saturation is achieved.
- Identify cultural differences which might affect the outcome of the main study.
- Allow for evaluation of proposed research methods through the identification and management of any elements that could jeopardize participants’ safety or violate their ethical and human rights, before exposing the participants in the main study to similar problems.

Pilot studies often reveal issues that could impact on the successful execution and completion of a research project; nevertheless, as Van Teijlingen and Hundley (2001) have stated, many inexperienced researchers neglect this important research step and rush to embark on the main study. This mistake can result in scientifically unsound and unethical research, and it could expose the research participants to risks or unnecessary inconvenience; all this could be minimized by conducting a pilot study (Duma et al., 2009; Ellsberg & Heise, 2005). Some may regard a pilot study as time-consuming and frustrating, but Aitken et al. (2003) believe that, in the long run, pilot studies can add value and credibility to the entire research project.

A further concern is that pilot studies do not guarantee that the main research study will be successful. The pilot study may not identify or solve all of the problems that the researcher may wish to resolve before embarking on a major study. For example, researchers may fail to make accurate predictions based on the pilot study data and may include participants and findings from the pilot study which may then “contaminate” the main study (Duma et al., 2009; Van Teijlingen & Hundley, 2001). Also, there seems to be very little published literature on researchers’ experiences of conducting pilot studies. This lack of a body of knowledge leads to a repetition of avoidable ethical and practical difficulties; likewise, there is the risk to prospective research participants of avoidable ethical and human rights violations.

### **Pilot Phase of the Current Study**

The various issues described above alerted the researcher to the possibility that ethical and practical difficulties could be anticipated during recruitment for the proposed longitudinal study. The chief methodological concern was to identify an appropriate and ethically sound way for locating, accessing, and recruiting intimate partners of women who have been sexually assaulted and to do this within the first two weeks after the rape. The purpose was to obtain the intimate partners’ participation in a six-month longitudinal study on the meaning that they attach to their lived experiences.

Davis et al. (1995) conducted a study of the impact of sexual and non-sexual assault on secondary victims, which involved contacting rape victims to gain access to their intimate partners. This method of recruitment was adapted for the current study; however, because of the prevailing socioeconomic and cultural differences in Cape Town, it was deemed necessary to undertake a pilot study to test the methodology of the proposed recruitment and data collection within a longitudinal research design.

### **Purpose and Methods of the Pilot Study**

The proposal accepted by the University of Cape Town (UCT) Human Research Ethics Committee (HREC) included the researcher’s methods for accessing, recruiting, and interviewing intimate partners within the first two weeks after the rape of their female partners. Purposeful sampling was used to select participants who met the inclusion criteria; the process followed during the pilot phase was to be similar to the one planned for the main study. Data collection methods included semi-structured interviews. A preliminary data analysis, using qualitative data analysis methods, was done at the same time as the data collection. The recruitment team at the rape centre, which was approved as the study site, met regularly with the researcher to discuss the ethical and practical difficulties experienced during the pilot phase. The methods and processes utilized during the pilot study are discussed below, according to three objectives.

The *first objective* of the pilot study was to assess the proposed methods for locating and accessing intimate partners of female rape victims, within the first two weeks after the rape, for



participation in the six-month longitudinal study. Would these procedures be appropriate and ethically sound? Connop and Petrak (2004) have indicated that it is a complex task to recruit intimate partners of rape victims to take part in rape research, particularly if potential participants must be recruited via the rape victims; partners of rape victims are “often not in contact with services and are therefore a difficult population to identify and assess” (p. 29).

To meet this objective of the pilot study, the researcher used the recruitment procedure of Davis and colleagues (1995), who recommended that gatekeepers introduce the rape victim to the study procedures and then allow the investigators to gain access to the intimate partner through the victim. Establishing and maintaining collaboration with fellow professionals who had access to rape victims at the selected recruitment site was crucial. This site is the only dedicated centre in Cape Town that offers medical treatment and counseling to rape survivors. It services the surrounding blue-collar suburbs and nearby informal settlements. This centre was chosen by the researcher as the preferred recruitment site for the study because it provided access to rape victims in a safe and controlled environment.

At first, the clinical managers of the recruitment site were informed by letter of the purpose and significance of the study and that the necessary ethical clearance had been obtained. Once the consent of the managers was given, a meeting was held with the medical and nursing staff of the rape care centre to brief them on the purpose of the study, recruitment procedure, inclusion criteria for selecting participants, required physical space, projected duration of the study, and the role of the researcher in the study. This meeting was important to ensure cooperation of the staff in identifying rape victims who met the study criteria, and for addressing potential areas of confusion (Munro et al., 2005; Van Wijk, 2011).

To gain access to the intimate partners, the attending medical or nursing staff at the centre identified female rape victims who were in an intimate relationship with a partner of any gender; this identification was done either directly after the rape, or at their 72-hour follow-up visit. The staff members were requested to gently inform victims of the nature of the study and to ask, without any pressure, whether they would want to meet with the researcher. If the victim responded positively, the researcher was summoned. The investigator was introduced to the rape victim in a private room where she verbally explained the purpose of the study and also provided an information document. Afterwards, the rape victim could choose to discuss the study with her intimate partner at home. The partner, if interested, had to contact the researcher by phone within 14 days of learning of the study, and the partner had to be willing to participate in four interviews over a period of six months.

The period of 14 days to decide on possible participation obviously did not guarantee successful recruitment and enrollment of participants in any way. Irrespective of how convincing a researcher is in explaining the purpose and details of a study, it cannot be assumed that potential recruits will automatically give consent and commit themselves to participate (Sterling & Peterson, 2004). Furthermore, the pilot study could also test how useful the information sheets were as a recruitment strategy.

The problems with access and recruitment that were identified during the pilot phase were centered around the staff at the study site and their understanding or interpretation of the study protocol. The nurses reported that they were either too busy or too short-staffed, or they had forgotten about the study. On other occasions, they contacted the researcher after the rape victim had left the facility. Therefore, not all the rape victims with intimate partners seen at the clinic were informed of the study. This significantly reduced the number of potential participants for recruitment. A corrective response was for the researcher to have more regular meetings with the

centre staff to educate them about the significance of the study and to place a poster on their notice board as an aide memoire.

The *second objective* of the pilot study was to assess the proposed recruitment and data collection methods to see whether they were suitable for the main study.

### **Recruitment**

The problems concerning recruitment were numerous. According to staff at the study site, many of the rape victims seen were not in intimate relationships. Although the inclusion criteria for the study made provision for a representative sample of gender and race, only black and mixed race men contacted the researcher during the pilot phase. No women from the White or Asian group, who were in a relationship during the recruitment period, attended the centre during this time.

Another limitation was that potential recruits did not want to participate in interviews at their workplaces or homes and could not attend interviews after hours or over weekends. Because they considered the rape to be a very private issue, they said they did not have the confidence to ask their employers for time off to attend interviews; thus, despite being interested, they could not agree to participate. Clashes with employment schedules undoubtedly contributed to slow recruitment and to the attrition of recruits.

During the recruitment period, the researcher received numerous “Please call me” messages from mobile telephones. These messages might have been from potential recruits. Such calls, however, are difficult to reply to for reasons of confidentiality. Several respondents were not English-speaking. It was clear that maintaining contact with potential recruits, as well as participants, would be tenuous.

The two male participants recruited to the pilot study indicated that they preferred not to be interviewed near their homes for reasons of safety; their partners were raped in the same area. Both agreed to be interviewed at the researcher’s place of work because this was the most convenient location. They received appointment cards so that the security personnel would allow them access to the building. Interviews occurred within the first two weeks after the rape, and then after a month, three months, and finally six months after the rape.

Intimate partners who contacted the researcher were invited to meet her individually. At that meeting, the potential participant was given an explanation of the aims of the study and the researcher’s role and her responsibilities concerning anonymity, confidentiality, privacy, the informed consent process, and how the information gained would be handled in the research process. Permission was sought to use a digital audio recorder, and the potential recruit was reminded of the right to not answer questions with which he or she felt uncomfortable, as well as the right to withdraw from the study without giving a reason.

### **Data Collection**

At the initial interview, a demographic questionnaire was completed, followed by the semi-structured interview schedule. The researcher started the conversation in the same manner with each participant, as follows: “Your partner was raped on [date]. Please tell me how you felt when you first heard about this.” The researcher encouraged participants to talk freely about their experiences of the rape of their partners and how they had managed.

A preliminary data analysis, using qualitative data analysis methods, was done immediately after the data collection. Despite the researcher's difficulties with contacting potential participants by telephone, the main study was commenced because both participants in the pilot phase were satisfied with the research methodology and had provided rich data in the interviews.

Another major problem, which was not initially anticipated, was that many potential recruits from the catchment areas of the study site were not comfortable with the English language; because the researcher also is not conversant in isiXhosa, the dominant language in the informal settlements, the language barrier would be clearly problematic. Many callers expressed disappointment that an interpreter would not be present. Although the researcher subsequently adjusted the methodology to incorporate an interpreter during the interviews, the interpreter was unavailable at times because of other work requirements or illness. The unavailability of the interpreter and the language problem resulted in many lost opportunities and delayed recruitment.

Some potential recruits who contacted the researcher expressed their wish to talk to someone, but when they heard that the researcher and the interpreter were women, they said they had trouble opening up about their deepest feelings and experiences to a woman and a stranger. Some of the questions in the semi-structured interview tool were not well understood by participants and required rephrasing, though probing was still needed during the interviews. The pilot phase thus enabled the researcher to make informed changes and adjustments to the semi-structured interview before moving on to the main data collection phase.

Another major strategic adjustment to the recruitment strategy was to improve the contact with potential recruits and with known participants. Reminding them of appointments by cellular phone was problematic, because these phones were frequently lost, stolen, or out of air time. The lesson from the pilot phase was that many contact numbers of friends or family should be obtained, subject to the proviso that the participant briefed each person that the researcher may phone them.

The researcher undertook to respond immediately to any "Please call me" cellular message requests to prevent loss of interest. A request to inform the researcher of any change in contact details, and the checking of existing numbers, would be repeated after each follow-up interview, to update participant personal files. Cellular messages would be sent to participants to remind them of the date of their next interviews. Additionally, after each interview the participants would receive a business card with the researcher's contact details and the date of their next interview, as well as previously agreed upon financial reimbursement for their time and travelling costs.

### **Other Issues**

Both of the pilot study participants reported that their partners wanted to know what they had said to the researcher, which led to arguments and additional stress in already-strained relationships. How these situations affected the interviews were difficult to determine.

Although using the hermeneutic-phenomenological approach of Paul Ricoeur (1995) allowed the researcher to be part of the research process, the unintended therapeutic expectations of the participants produced additional strain. The researcher strictly maintained the boundaries of the researcher-participant relationship and, when necessary, the participants were referred to mental-health facilities. In addition, because of the emotionally-laden nature of the interviews, the researcher identified the need to arrange intermittent limited debriefing for herself, which was not anticipated during the development phase of the study.

These issues, revealed during the pilot phase, allowed methodological adjustments and improvements to be considered. To overcome the language barriers and to retain participants in the main study, the appointment of a trustworthy interpreter, to assist with the interviews, was arranged. This requirement and its implication for the main study were supported by the university ethics committee, as well as by the recruitment site staff and the researcher's two supervisors.

The *third objective* of the pilot study was to determine whether it was practically feasible to conduct the main study, given the constraints of limited financial and human resources. As discussed below, a number of methods were used to meet this objective.

It was essential to reimburse participants, at least for their travelling expenses, because they had no guarantee of deriving any other benefit from their participation. Although there are diverse opinions about whether participants should be compensated for their time spent on study participation, the researcher decided that the main focus of discussion with participants about reimbursements should be on the issue of travel costs. It was felt that any larger amounts may be wrongly construed, with the potential of inducing biased responses at the interviews. Because interviews lasted between one and two hours, refreshments for both the participant and the interpreter were to be provided. In terms of human resources, the researcher was initially the sole research instrument in the early stage of the pilot study, although at a later stage an interpreter was appointed for the remainder of the pilot study and the whole of the main study.

Regarding the expense account, the reality was that most participants left messages and did not phone the researcher directly, which resulted in high telephone bills for the researcher. Some of the potential recruits indicated that the reimbursement of R50 (7 USD) per interview, which was offered by the researcher, was too little, and they did not turn-up for their interviews. The two pilot participants, however, said money was not the reason for their participation and they were satisfied with their payments. Hence, the pilot study not only timeously identified methodological shortcomings but also informed the researcher of likely budgetary issues for the main study. The costs of reimbursements, appointment of an interpreter, refreshments, and additional telephone costs could be taken into consideration.

### **Summary and Conclusion**

The focus of this pilot study was to discover and manage potential problems which could interfere with vulnerable participants' ethical and human rights, so that such problems could be addressed before the main study. Other contentious methodological shortcomings could also be identified. A pilot study, however, does not guarantee that ethical and practical problems will not occur at a later stage; after all, not all practical situations are encountered in the pilot study and some may remain unknown until they surface. A pilot study can, nevertheless, be viewed as a dress rehearsal for the main investigation (Van Teijlingen & Hundley, 2001).

All three objectives of this pilot study supplied valuable information, which was used in managing the ethical and practical issues that could have arisen during the main qualitative study involving a vulnerable population. The ethics underpinning such a study should reflect, *inter alia*, the principles of confidentiality and "doing no harm."

It is believed that the pilot study helped this researcher to avoid and manage problems prior to the main study by allowing modifications of the research design (Campbell & Wasco, 2005). In practice, if other unforeseen problems should arise during the main study, the methodology can

still be adapted and modified, provided that these changes are communicated to and approved by the responsible ethics committee (Duma et al., 2009; Strydom, 2005b).

In conclusion, this pilot study helped to safeguard the participants' safety and it increased the credibility and likely success of the main study. The authors believe that this article highlights the importance and value of conducting a pilot study. It should be seen as an integral part of the research process, and therefore a prospective researcher should resist the temptation to leave it out and rush headlong into the main investigation without pre-testing its design (Duma et al., 2009; Strydom, 2005b).

## References

- Aitken, L., Gallagher, R., & Madronio, C. (2003). Principles of recruitment and retention in clinical trials. *International Journal of Nursing Practice*, 9(6), 338–346.
- Bless, C., & Higson-Smith, C. (2000). *Fundamentals of social research methods: An African perspective* (3<sup>rd</sup> ed.). Lansdowne, Cape Town, South Africa: Juta.
- Bot, H. (2005). *Dialogue interpreting in mental health*. Amsterdam, The Netherlands: Rodopi.
- Bronsdijk, M. (2006). *Interpreter in the language analysis interview: Translation machine or second interviewer?* [Master's thesis, Utrecht University, Utrecht, The Netherlands]. Retrieved from <http://igitur-archive.library.uu.nl/student-theses/2007-0607-201206/UUindex.html>
- Campbell, R., & Wasco, S. (2005). Understanding rape and sexual assault: 20 years of progress and future directions. *Journal of Interpersonal Violence*, 20(1), 127–131.
- Clayton, K. (2009). *The Declaration of Helsinki: Is it still relevant in the ethical conduct of clinical trials?* [PowerPoint slides]. Retrieved from <http://ockham.com/wp-content/uploads/2012/12/Declaration-of-Helsinki-02-Dec-09.pdf>
- Connolly, P. (2003). *Ethical principles for researching vulnerable groups*. Retrieved from <http://www.ofmdfmi.gov.uk/ethicalprinciples.pdf>
- Connop, V., & Petrak, J. (2004). The impact of sexual assault on heterosexual couples. *Sexual and Relationship Therapy*, 19(1), 29–38.
- Cooley, M. E., Sarna, L., Brown, J. K., Williams, R. D., Chernecky, C., Padilla, G., & Danao, L. L. (2003). Challenges of recruitment and retention in multisite clinical research. *Cancer Nursing*, 26(5), 376–384.
- Cottingham, J., & Jansen, H. (2005). *Ethical and legal issues in sexual health research*. [PowerPoint slides]. Retrieved from [http://www.gfmer.ch/PGC\\_RH\\_2005/pdf/Ethics\\_SH\\_course.pdf](http://www.gfmer.ch/PGC_RH_2005/pdf/Ethics_SH_course.pdf)
- Davis, R. C., Taylor, B., & Bench, S. (1995). Impact of sexual and non sexual assault on secondary victims. *Violence and Victims*, 10(1), 73–84.
- De Vos, A. S., Strydom, H., Fouche, C. B., & Delpont, C. S. L. (2005). *Research at grass roots* (3<sup>rd</sup> ed.). Pretoria, South Africa: Van Schaik.
- DiMattio, M. J. (2001). Recruitment and retention of community-dwelling, aging women in nursing studies. *Nursing Research*, 50(6), 369–373.
- Duma, S. (2006). *Women's journey of recovery from sexual assault trauma: Grounded theory* (Unpublished doctoral dissertation). University of Cape Town, Cape Town, South Africa.
- Duma, S., Khanyil, T. D., & Daniels, F. (2009). Managing ethical issues in sexual violence research using a pilot study. *Curationis*, 32(1), 52–58.

- Edwards, R., & Mauthner, M. (2002). Ethics and feminist research: Theory and practice. In M. Mauthner, T. Miller, M. Birch, & J. Jessop (Eds.), *Ethics in qualitative research* (pp. 14–31). London, United Kingdom: Sage.
- Ellsberg, M., & Heise, L. (2005). *Researching violence against women: A practical guide for researchers and activists*. Geneva, Switzerland: World Health Organization.
- Flaskerud, J. H., & Winslow, B. J. (1998). Conceptualizing vulnerable populations in health related research. *Nursing Research*, 47(2), 69–78.
- Gerrish, K., Chau, R., Sobowale, A., & Birks, E. (2004). Bridging the language barrier: The use of interpreters in primary care nursing. *Health and Social Care in the Community*, 12(5), 407-413.
- Gross, D., & Fogg, L. (2001). Clinical trials in the 21<sup>st</sup> century: The case for participant-centered research. *Research in Nursing and Health*, 24(6), 530–539.
- Gross, D., Julion, W., & Fogg, L. (2001). What motivates participation and dropout among low-income urban families of color in a prevention intervention? *Family Relations*, 50(3), 246–254.
- Gubrium, J. F., & Holstein, J. A. (2001). *Handbook of interview research: Context and method*. Thousand Oaks, CA: Sage.
- Horn, L. (2008). Payment of clinical trial participants. *South African Medical Journal*, 98(2), 93–94.
- Hsieh, E. (2007). [Review of the book *Dialogue interpreting in mental health*, by H. Bot]. *Journal of Language and Social Psychology*, 26(4), 410–415.
- Kilanowski, J. F. (2006). Lessons learned from a pilot study on the health status of children from itinerant populations. *Journal of Pediatric Health Care*, 20(4), 253–260.
- Lyons, K. S., Carter, J. H., Carter, E. H., Rush, K. N., Stewart, B. J., & Archbold, P. G. (2004). Focus on research methods: Locating and retaining research participants for follow-up studies. *Research in Nursing and Health*, 27(1), 63–68.
- McKenzie, M., Tulskey, J. P., Long, H. L., Chesney, M., & Moss, A. (1999). Tracking and follow-up of marginalised populations: A review. *Journal of Health Care for the Poor and Underserved*, 10(4), 409–429.
- Meltzoff, J. (2005). Ethics in research. In S. Bucky, J. Callan, & G. Stricker (Eds.), *Ethical and legal issues for mental health professionals* (pp. 311–336). New York, NY: Hayworth.
- Milectic, T., Piu, M., Minas, H., Stankovska, M., Stolk, Y., & Klimdis, S. (2006). *Guidelines for working effectively with interpreters in mental health settings*. Victoria, Australia: Victorian Transcultural Psychiatry Unit. Retrieved from [http://www.vtpu.org.au/docs/interpreter/VTPU\\_GuidelinesBooklet.pdf](http://www.vtpu.org.au/docs/interpreter/VTPU_GuidelinesBooklet.pdf)
- Moore, M. L. (1997). Recruitment and retention: Nursing research among low-income pregnant women. *Applied Nursing Research*, 10(3), 151–158.

- Munro, E., Holmes, L., & Ward, H. (2005). Researching vulnerable groups: Ethical issues and the effective conduct of research in local authorities. *British Journal of Social Work*, 35, 1023–1024.
- National Health Research Ethics Council. (2011). *Ethical-legal protection for vulnerable research participants in South Africa: An audit of relevant laws and ethical guidelines*. Retrieved from <http://www.nhrec.org.za/wp-content/uploads/2011/ethicalguidelines.pdf>
- Packer, M. J., & Addison, R. B. (Eds.). (1989). *Entering the circle: Hermeneutic investigation in psychology*. Albany, NY: State University of New York Press
- Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods* (7<sup>th</sup> ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
- Ribisl, K. M., Walton, M. A., Mowbray, C. T., Luke, W., Davidson, W. S., & Bootsmiller, B. J. (1996). Minimizing participant attrition in panel studies through the use of effective retention and tracking strategies: Reviews and recommendations. *Evaluation and Program Planning*, 19(1), 1–25.
- Ricoeur, P. (1995). *Hermeneutics and the human sciences*. Cambridge, MA: Cambridge University Press.
- Rogers, A. C. (1997). Vulnerability, health and health care. *Journal of Advanced Nursing*, 26, 65–72.
- Rudy, E. B., Estok, P. J., Kerr, M. E., & Menzel, L. (1994). Research incentives: Money versus gifts. *Nursing Research*, 43, 253–255.
- Sherlock, C., & Thynne, C. (2010). Research with vulnerable groups: Collaboration as an ethical response. *Journal of Social Work Values and Ethics*, 7(2), 1–11.
- Sterling, Y. M., & Peterson, J. W. (2004). Lessons learned from a longitudinal qualitative family systems study. *Applied Nursing Research*, 18(1), 44–49.
- Strydom, H. (2005a). Ethical aspects of research in the social sciences and human service professions. In A. S. de Vos, H. Strydom, C. B. Fouche, & C. S. L. Delpont (Eds.), *Research at grass roots* (3<sup>rd</sup> ed., pp. 56–70). Pretoria, South Africa: Van Schaik.
- Strydom, H. (2005b). The pilot study. In A. S. de Vos, H. Strydom, C. B. Fouche, & C. S. L. Delpont (Eds.), *Research at grass roots* (3<sup>rd</sup> ed., pp. 210–216). Pretoria, South Africa: Van Schaik.
- Sullivan, C. M., & Cain, D. (2004). Ethical and safety considerations when obtaining information from or about battered women for research purposes. *Journal of Interpersonal Violence*, 19(5), 603–618.
- Temple, B., & Edwards, R. (2002). Interpreters/translators and cross-language research: Reflexivity and border crossings. *International Journal of Qualitative Methods*, 1(2), 1–12.



- Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., Robson, R., Thabane, M., Giangregorio, L., & Goldsmith, C. H. (2010). A tutorial on pilot studies: The what, why and how. *BMC Medical Research Methodology*, *10*.
- Van Teijlingen, E., & Hundley, V. (2001). The importance of pilot studies: The example of the Scottish British Births Survey. *Journal of Advanced Nursing*, *34*(3), 289–295.
- Van Teijlingen, E., & Hundley, V. (2002). The importance of pilot studies. *Nursing Standard*, *16*(40), 33–36.
- Van Wijk, E. (2011). The lived experience of male intimate partners of female rape victims in Cape Town, South Africa (Unpublished doctoral dissertation). University of Cape Town, Cape Town, South Africa.
- Wadensjö, C. (2004). Dialogue interpreting: A monologising practice in a dialogically organised world. *Target*, *16*(1), 105–124.
- Watson, R., Atkinson, I., & Rose, K. (2007). Pilot studies: To publish or not [Editorial]. *Journal of Clinical Nursing*, *16*, 619–620.
- World Medical Association (WMA). (2008). *Declaration of Helsinki: Ethical principles for medical research involving human subjects*. Geneva, Switzerland: World Medical Association.