

Dilemmas and paradoxes in providing and changing antenatal care: a study of nurses and midwives in rural Zimbabwe

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This paper describes the experiences of caregivers in a rural district in Zimbabwe, in caring for pregnant women within a context of changing antenatal care routines. Data were generated using individual interviews with 18 nurses and midwives.

The caregivers experienced their working situation as stressful and frustrating due to high staff turnover, inconsistent policies, parallel programmes and limited resources, including time. They also faced difficulties when implementing some of the proposed changes. Furthermore, the caregivers had to deal with the pressure and resistance from the pregnant women, whose reasoning and rationale for using care appeared different from those of the health professionals.

In light of the above, we stress the necessity for reflecting on and including the experiences and perspectives of caregivers and the users of care, as well as their contexts and realities, when implementing change.

Key words: antenatal care, midwifery, evidence-based care, maternal health, Zimbabwe

Introduction

The standard antenatal care (ANC) has been challenged during the past two decades. Critics have argued that ANC is not based on scientific evidence and therefore does not meet the needs of pregnant women. In addition, in many low-income countries and in subgroups in rich countries, existing ANC is not of sufficient quality to achieve primary medical goals such as reducing maternal mortality. A number of intervention studies have thus been conducted in which the structure of the ANC has been changed to incorporate evidence-based practice (Munjanja et al. 1996; Villar et al. 2001). These initiatives have arisen from the realization that there is a lack of substantive justification or medical value for many of the established procedures (Lindmark 1992; Villar et al. 2001). Studies comparing the conventional visit schedule with a reduced one have observed that, although women have sometimes expressed concern over the spacing of visits, both caregivers and women users are generally satisfied with the reduction in the number of visits (Munjanja et al. 1996; Sanders et al. 1999; Villar and Neelofur 1999; Villar et al. 2001; Langer et al. 2002). These studies conclude that the new ANC package does not negatively affect maternal and perinatal outcomes. While this may be true, other studies have indicated that other forms of evidence, based on criteria other than medical ones, are also necessary (Sanders et al. 1999; Walker et al. 2002).

Some discrepancies have been reported between the assumptions underlying the proposed and actual changes of the ANC and what the caregivers actually do, even when they agree with the goals of the new routines. Sanders and colleagues carried out an evaluation of a clinical trial in Britain to introduce a flexible antenatal schedule in which women decided themselves on the number and timing of their visits (Sanders et al. 1999). The midwives in this study reasoned that the flexible schedule reinforced the normalcy in pregnancy. However, they felt that the gap of 8 weeks between visits was unacceptably long. Whereas they accepted in principle the change from the conventional schedule of care, they were concerned that women's psychosocial needs would be unfulfilled. They consequently were reluctant to integrate the changes into their practice. Similar observations were made in the USA in a study of midwives' attitudes towards the use of a new ANC package (Walker et al. 2002). Fifty-nine percent of the midwives in the study indicated that a minimum of eight visits was necessary to provide effective care, but only 17% reported that they actually followed the reduced visit schedule.

We find certain theoretical perspectives highlighting the complexity of the social context relevant to this study. In particular, those theoretical perspectives focusing on the significance of the intersection of different forms of power or knowledge, such as professional, administrative, institutional and cultural, in making sense of the realities

and decisions on health matters (Berger and Luckmann 1967; Guba and Lincoln 1989; Bryar 1995; Nygren 1999). This means there is not one truth or reality but many (Guba and Lincoln 1989) and that it is important that the views of different stakeholders, such as professionals, policy-makers and managers, are understood alongside the experiences of line caregivers and women users of health care in any intervention, or in deciding the evidence on which to base interventions.

This qualitative study was undertaken in a rural district in Zimbabwe, to explore the meanings, perspectives and experiences of caregivers in the care of pregnant women in the context of attempts to introduce a new ANC package. It was a follow-up of a randomized trial introducing a new ANC package in the same district. The package recommended five goal-oriented visits during the entire course of a pregnancy, with fewer procedures and with specific goals for each ANC visit (Majoko 1995). Routines considered to have little medical value, such as weighing, were to be omitted. Preliminary analysis of the randomized trial suggested, however, that there were problems of compliance with the proposed changes by both the providers of care and the women users.

Background to antenatal care in Zimbabwe

In the standard ANC, women in Zimbabwe are expected to report early in the pregnancy. A woman reporting at 12 weeks and delivering at 40 weeks gestation would make 14 ANC visits (Munjanja et al. 1996). During the first visit her history is taken and risk factors are assessed. At subsequent visits, routine procedures are performed, including taking blood pressure, abdominal palpation together with foetal heart auscultation, examination for oedema, weighing and urinalysis (Munjanja et al. 1996). Women found to have risk factors are referred to the district hospital. The proposed changes in the new ANC package included fewer visits and strict referral routines and left out weighing and urinalysis, which was done only on indication. Instead of weighing, symphysial-fundal height measurement was used. The results of a randomized trial in Harare, the capital of Zimbabwe, indicated that it was possible to reduce the number of visits in a normal pregnancy from the usual 14 to five goal-oriented visits without increased perinatal morbidity or mortality (Munjanja et al. 1996). As mentioned above, a similar randomized controlled study was undertaken in a rural setting, with the preliminary analysis suggesting that the caregivers and the women users of care had problems in following the changes introduced.

The proposed changes were to be implemented in a rural context, where resources available for health care are generally scarce, although resource availability may differ slightly depending on whether a facility is run by the government, district council or non-governmental organizations (NGOs), including Christian missions. The facilities run by missions/NGOs tend to have better resources, including more staff and access to an ambulance. The government-run facilities usually have an

ambulance based at the district hospital, but access is unreliable since the radio and telephone systems may be out of order when an ambulance is needed. Larger rural health facilities have established waiting shelters for women coming from villages far from the facilities to await labour at the facility (Nhindiri et al. 1996). Women using the shelters are expected to provide their own meals and other personal needs. According to government policy, each rural health centre is supposed to be staffed by a trained midwife, a nurse and a nurse aide (Ministry of Health and Child Welfare 1994). In reality however, most clinics only have one state certified nurse. This situation reflects the declining state of health care the country has experienced in the past few years, largely because of the current economic crisis but also due to economic reforms (Economic Structural Adjustment Programme) (Chimhete 2002). The health budget reportedly has been cut by 40% during the past 6 years, leading to a significant exodus of staff, shortage of essential drugs and high user fees (Mukumbura 2000; Ncube 2003).

Methods and the research process

The study started with a workshop organized as part of finalizing and giving feedback to caregivers who had participated in the abovementioned 2-year randomized trial to introduce a new ANC package. The workshop generated interesting information on the work situation of the caregivers, their experiences of implementing change and their interaction with women seeking care. This information was important in our decisions on undertaking a qualitative study, on sampling, on research participants, on data-generation methods and on interview questions, to understand the experiences of caregivers and women users and their reasoning around antenatal care and implementation of the new ANC package.

Study setting

The study site was Gutu district, 225 km southeast of Harare. The population of 230 000 inhabitants is served by 25 health facilities. Among these are 18 health centres that offer mainly outpatient services, but have up to four beds for observing patients for 24 hours, as well as a few beds for postnatal care. Inpatient facilities are provided at six larger health centres, half of which are mission facilities, and one district hospital.

Selection of research participants and data generation

Individual interviews were conducted with 18 caregivers after obtaining ethical clearance from the relevant authorities in Zimbabwe and Sweden and consent from the research participants. The participants were purposively selected from among those who had participated in the randomized ANC trial. Selection was designed to include those workshop participants who expressed strong opinions, whether positive or negative, about the changed routines, as well as those whose remarks indicated an unusual attitude or situation such as having a good working relationship with traditional birth attendants

Table 1. The study participants

Years of experience	No. of participants	Professional characteristics
20–30	7	1 male principal state certified nurse, 6 state certified nurses, 4 with midwifery
10–19	4	2 state registered nurses with midwifery, 1 male and 1 female state certified nurse
5–9	2	1 male state registered nurse with midwifery and 1 state certified nurse
0–4	5	3 state registered nurses, 1 male, 2 student nurses

(TBAs). Also included in the interview group were caregivers from health facilities said to be more hostile to the randomized trial. Some interviews were conducted at the clinics, whereas others took place at the homes of individual caregivers. The interviews followed a question guide, with the scope of the questions focused on the participants' experiences and views about providing ANC, the implementation of the new ANC package, their working environment and their encounters with women using ANC.

The 18 caregivers interviewed had between 0.5–30 years of work experience. Two were students. Ten were state certified nurses (attended 2-year nurse training), of whom four had a midwifery qualification. Six were state registered nurses (attended 3-year nurse training), of whom three had midwifery competence. Of the 18 interviewees, 14 were female (see Table 1).

Throughout the research process, observations were made by the first author (TM) on various aspects of care. Particularly observed were the interactions between the caregivers and the women during the health education sessions and as the women moved through the process of care. The observation method enabled us to study these interactions undisturbed or as they occurred naturally (Morse 1996). Notes were taken during the session or soon after. The health education sessions were tape-recorded when consent was given by the women and the caregivers.

Data analysis was, as is common in qualitative research or in an emergent design, a continuous process (Morse 1996; Patton 2002). This meant that issues of relevance emerging from an interview were included in subsequent interviews and observations. The staffing situation, especially staff turnover, was one such issue that emerged as an important factor, affecting not only provision of care but also implementation of the proposed changes.

The audio-taped interviews were transcribed and translated from Shona to English. The transcripts were then read and reread with manual marking of words, phrases and segments of the text bearing meaning (Strauss and Corbin 1998; Hallberg 2002) in order to identify codes and categories and to develop themes. Some of the codes included labels such as drug shortages, high staff turnover, staff shortages, performance appraisal, erratic supplies, weighing, referrals, late bookings and card collection, frustrated, disappointing, unethical and no

leave. An open approach was maintained by repeatedly returning to the data in order to look beyond what had already been seen. Categories were compared and contrasted, and recurring elements were matched. In this process, a number of categories were generated that seemed to address issues of policy and organization of health care, resource context and the tensions in providing care, interacting with women and implementing the proposed changes (Strauss and Corbin 1998; Mayan 2001). The data analysis process resulted in three themes.

Results

This section presents the three themes derived from the data. The first theme concerns issues of policy and practice and organizational contexts within which the staff said they offer care and implement the proposed changes. It highlights the conflicts arising when policies are formulated with little reflection on the local conditions within which they are implemented. The second theme concerns the resource context and focuses on the challenges of caring for women under conditions of resource constraints. The last theme is about the dynamics in the community and their impact on caregivers in changing long-established ANC routines. Policy practice, resource constraints and community dynamics intersect, creating a complex work situation. This results in a stressful work environment and paradoxes and dilemmas for the caregivers in caring for women, interacting with them and implementing recommended change. The three themes illuminate in part the complexity of caring for women whose rationale and meanings of ANC are different from those of the biomedical professionals. They also illuminate the problems and dilemmas created by policy formulation that is insensitive to the situations at the implementing level.

Policy and organizational context

In discussing ANC and its provision, this section presents the dilemmas the caregivers say they experienced due to inconsistent policy decisions and organizational changes made with little consideration of the realities experienced by the staff or the users of care. Such policies exacerbated an already stressful working situation. This meant that the caregivers failed not only to give optimal care, but also to implement the recommended changes, which were partly meant to improve their work situation. They were, moreover, overworked and too stressed to find time to interact with the women or to reflect on their lecturing

form of interaction during health education sessions, which ignored the women's own experiences.

The staff described their working situation as stressful and frustrating. This, they implied, was due to staff shortages, inconsistent government policy regarding staffing and job description, staff turnover or constant transfers, the brain drain of qualified staff and the introduction of many parallel programmes. All these factors were said to lead to a heavy and stressful workload for the caregivers. They also resulted in some caregivers leaving because of the deteriorating working conditions, even though some of the changes were actually meant to ease their workload:

We had a problem of high staff turnover. A number of caregivers were transferring to urban centres and private institutions because of poor working conditions. At times they were never replaced. (PF6)

According to the accounts of the caregivers, the staff shortage meant being on call for 24 hours. They could neither take days off nor make home or outreach visits, as indicated during an interview with a male caregiver:

Understaffing is a problem, just now I cannot go for a home visit... I cannot go because there will be no-one. I can't go off... I am always here. I work throughout the day and night. (PM3)

During the workshop mentioned above, we observed that only three of the 23 caregivers who had participated in the 2-year randomized controlled study were still in the same clinic at the end of that study. The majority had been transferred from one clinic to another, even across districts. The high staff turnover was said to have affected the implementation of the proposed changes, especially because there was never a proper handover.

The staff situation was said to have been exacerbated by a new government policy that prohibited nurse aides from undertaking clinical tasks they had performed before, a policy described as frustrating for the patients as well. The caregivers expressed concern over the negative image this created among patients:

The nurse aides are not allowed to do dressings, deliveries... you find when I am away, even simple things she will have to refer to another clinic. So the people end up thinking that we are not doing anything, that we do not care about them. (PM15)

The caregivers implied that they designed their own ways of coping with the situation. One strategy commonly used to ease pressure was to ignore the government directives about nurse aides and let them perform the prohibited tasks, although at times they were accused of doing things incorrectly. One caregiver said:

... it is work as usual, we just pretend we did not see the new circular, we just do our work... even the statistics the nurse aide has to compile for the monthly report when

I have something very important to do. I just leave her to compile... We don't know what the government can do about the situation... If the situation remains as it is, then more caregivers will run away because of too much work. (PF17)

Another area of concern that the caregivers described as interfering with their performance was the large number of programmes implemented simultaneously. At the time of the interviews they mentioned the baby friendly hospital initiative, nutrition gardens project, home-based care and a malaria study, all introduced by different agencies at the same time, as well as ongoing TBA training. Each of these had its own supervisor who came to the health centre at different times to monitor implementation, with a checklist that included an assessment of the progress and compliance with protocols. The already overburdened staff were not only expected to answer these questions, but also to attend separate workshops about each programme.

In such cases, the caregivers were caught between the demands of the parallel programmes and the requirements of the government's core programmes on which staff performance appraisal was based. Performance appraisal was described as a management tool for assessing and upgrading government employees. Each employee was given specific targets/tasks to achieve within a specified period. The new ANC programme was not among the key result areas for appraisal. It seems that the caregivers had to make priority choices by concentrating only on the key appraisal areas:

The ANC project is not included in the key result areas, so we do not... put in much effort. We treat it like any other project from outside; we do not feel obliged to implement the new changes. (PM4)

Interaction between caregivers and women users

This section, largely based on observational data, illuminates some of the constraints mentioned above in the actual interaction between the caregivers and the women users of care. The interaction in the health education sessions not only suggests some shortcomings in this particular way of giving information, but also illustrates the subtle ways the receiver may resist. Resistance provided the educator with opportunities for reflection, but actual instances of reflection seemed rare.

Women were required to participate in health education sessions during weekly ANC visits and the health centres were more congested on ANC days. On one such day observed in a mission health centre, two caregivers attended to 74 women who came for ANC, in addition to other patients who formed a long queue. The day started with a health education session in a lecture form, the emphasis being biomedical knowledge on the care of pregnancy and childbirth. The women attempted to explain their situation, particularly why certain knowledge may not function in, or relate to, their life situations.

There was, however, little reflection on the part of the caregivers about what the women were saying. Women were raising a central issue that health education may be meaningless unless given in ways which enable the receivers to incorporate the message into their thinking pattern, their realities and the ways the women make sense of their world. The following conversation during a health education session is illustrative:

1st nurse: *The problem is...when...pregnant...you are always complaining of little ailments... The other problem is that you tend to do a lot of hard work all the time. If someone is pregnant she is supposed to rest and not spend the whole day digging...*

Woman: *But what do we do, because we have to work?*

1st nurse: *You have to do light jobs only...some...say they are exercising, but you cannot exercise by digging.*

Woman: *You are supposed to exercise when pregnant because that is what you always tell us when we come here.*

1st nurse: *Yes, there are special exercises for pregnant women, but you cannot refer to carrying of heavy loads, such as the firewood you carry at home, as exercising.*

Woman: *But you cannot avoid doing some of those things. You have to do, if you are a woman. There is no way out. You have to understand that...*

Apart from this lecturing form of interaction, the caregivers used other strategies when they felt strongly about the importance of a particular course of action. They said they may try to persuade the women against certain actions, for example the use of traditional medicine. At other times the caregivers used military-like orders, as recounted by a caregiver with 30 years of work experience:

Well! Caregivers are known to be rude...it pays to be rude. Like what one nurse used to do...if you went to the clinic with a dirty child, he would give you a piece of soap to go and bathe yourself and the baby in the river and then come back for the check-up. So people began to understand that if you are going to the clinic you have to be smart. (PM4)

During fieldwork, incidents where caregivers were unfriendly in their interaction with patients were also observed. One such incident was observed in a queue outside a congested health facility in which the caregivers shouted at the waiting patients and even physically pushed away those whom they said were not following the rules. The caregivers said this was the only way to handle what they described as 'stupid women'.

The caregivers could at times reflect and describe how the pressure of work affected their interaction with the women. Because the caregivers lacked time to explain even the basic procedures, women were left to interpret

things from their own perspectives. But as there was no opportunity for the women to express their perspectives verbally, they expressed themselves in other ways, for example, resisting passively, as the experience of one caregiver suggests:

I think the problem is with us caregivers. We never sit down with these women and explain what this is for...One day I prepared them for the tests and made them sit in a row on the benches. I had told them that they were going to have a blood test, so when I went out to get the containers, they left one by one and by the time I came back there was no one on the benches, they had all gone. So when they came back for their regular check-up I asked them what happened and they said they didn't want to be tested for HIV. That was my problem because I had not explained why I was going to test their blood. And I think it is the pressure we have that makes us have less time to talk to patients. (PF9)

The structural resource context at the local level

In their discussion of their work situation, the caregivers described how the resource-constrained context in which they work frustrated them. The drug shortage in particular seemed central in this respect because it forced caregivers to give patients inappropriate treatment, which compromised their professional ethics and led to a sense of inadequacy. They expressed concern over the way this situation affected desperate patients, but also how it reflected on them and their work as professionals. The caregivers said they received complaints from patients who described the clinics as 'useless' and accused the caregivers of being lazy or of stealing drugs. If the women had paid for the services, for example, at the council clinics, the caregivers said they found it even more embarrassing to explain the problem of drug shortages. A caregiver from a council clinic said:

It is so embarrassing to be telling people the same story every time. You know they desperately need the drugs but you cannot do anything. You cannot help them. (PF15)

The shortage of drugs and poor quality of service was said to create a feeling of inadequacy, as expressed by a caregiver during an interview:

It is so frustrating and disappointing to us as professionals. At times you ask yourself why you are here if you cannot give patients the service they want. (PF4)

At times the caregivers said they dealt with such dilemmas by giving expired drugs without the patient's knowledge, even though they perceived this to be professionally unethical. One caregiver said:

At times we end up just giving patients the expired drugs even though we know it is wrong and it is not allowed. It's unethical, but what do you do, because that is all you have. We just give; we do not tell them. (PF16)

Another strategy was to use their own resources. One caregiver described a case where she had to give her own drugs to assist a poor child who could not reach the hospital:

I had a case last week of a child who was brought here with burns. I referred him to hospital...but the grandparents had no bus fare so they came back after a week without treatment. Out of sympathy I had to give my own ointment. (PF16)

These frustrations were compounded by their physical working conditions, which lacked piped water, electricity and telephones. Thus, in cases where delivery took place at night, the caregivers were forced to use candles and fetch water from the boreholes, as explained by one caregiver:

Just look at the building. You cannot tell it is a health centre, the health centre is...remote...the working conditions are poor, there is no transport, no telephone...It becomes sad if you have an emergency and you cannot call an ambulance. At times you watch patients dying and you cannot help in any way. (PF7)

According to the caregivers, the referral system – a central routine in ANC – did not function due to transport problems, travelling costs, shortage of ambulances, lack of telephones or radio communication, costs of care and methods of payment at the hospital. The referred cases reportedly often returned to the clinic without any treatment:

Ah! You find after referring a mother, 2, 3 days later she comes back for a BCG... You ask 'why didn't you go to hospital?'...she says 'I did not have money'. (PF5)

Dilemmas in changing long-established antenatal care routines

This section highlights the dilemmas caregivers said they experienced in changing long-established ANC procedures. While this, too, reflects the policy and organizational context as well as resource constraints described above, it is the impact of the community dynamics that are especially illuminated here. The caregivers said they experienced difficulties in reducing the ANC visits and omitting the weighing routine during ANC visits, mainly because of resistance from the women, but also because of their own views of change and the late bookings by women.

The different meanings of antenatal care visits

The new ANC package recommended a schedule of five goal-oriented ANC visits but there seems to be a discrepancy between the recommended visit schedule and what the women and the caregivers appeared to do. The caregivers generally accepted the rationale of reduced visits, particularly given their constrained work situation. However, they reported experiencing pressure from the

women, who sometimes wanted more visits and often came in-between the set dates. The caregivers described other difficulties, such as late initial booking by women that made it difficult for them to further reduce the visits, especially when women made their first visit after 28 weeks.

Moreover, whereas the policy stipulated a practice commonly known as the 'supermarket approach', allowing women to make ANC visits on any day of the week, the caregivers said they made their own arrangements and fixed one day in the week for ANC visits in an attempt to reduce the workload on the other days. The days varied from one clinic to another, but most caregivers indicated that they tried to avoid Thursdays. Paradoxically, Thursday was a non-working day for women for religious reasons and was therefore preferred by many women for ANC visits:

They come and we give them dates, except Thursdays...Normally Thursday is not a working day in this community, so to them Thursday is a clinic visiting day...Even when given a date, they wait for Thursday...they never observe the dates. (PF8)

The caregivers, furthermore, reported how the young women in particular came in-between the recommended spaced visits if they felt they had gone too long without being checked. A caregiver said in an interview:

We discovered that if women stay away for too long, they tend to come anytime, saying that they had stayed away for too long. So normally they come before the due date...we examine them because it is not good to turn away a patient...some...come from very far. (PF5)

Our data suggest that although the women may not openly challenge the staff or the changes being introduced, they nonetheless had their own ways of circumventing the policy decisions at the clinic. A caregiver described the strategies used by women:

Women just come and say they are not feeling well you know. Some say the child is no longer making any movements. So you end up carrying out all the procedures. (PF4)

Some of the reasons given by women for the frequent visits were described as flimsy or as minor ailments. But once the women had come, they were attended to:

Normally when they are asked about the problems, they give minor reasons like back pain...you wouldn't turn them away because it's not nice. (PF16)

Experiences with the weighing procedure

The new package recommended omission of weighing, which is now considered to have little medical value. The behaviour of both the caregivers and women regarding weighing suggests that, as with the visit schedule, there was

a conflict between the assumptions and recommendations of the evidence-based care and the perspectives of users of care. The pressure from the women, who perceived ANC visits as largely entailing standing on the scale to be weighed, made it difficult for the caregivers to omit it. Moreover, even the caregivers themselves were unconvinced that it was necessary to omit a long-established routine that they had been trained to do and that was simple for women to understand and even to do themselves.

The caregivers implied that since this was a long-established procedure in which women just stood on the weighing scale to check their weight, sometimes even without requiring assistance from the caregivers, they were under a great deal of pressure to comply with the women's demands:

Ee-e, we did it for the interest of the mothers. They want to know if they are gaining or losing weight... I don't know how they came to call it (ANC visits) 'we are going for scale'. They associate their going to the clinic with routine things done there. They expect to be weighed every time. (PF7)

On other occasions, a woman would just stand on the scale and demand to be weighed after all the other procedures had been done, if weighing happened to be omitted:

You found out that soon after doing everything, the mother went to the scale. You know we keep them in our observation rooms (laugh), and she will say 'can I check my weight'. (PM5)

The problem was, however, not just pressure from the women. Some of the caregivers were themselves not convinced about the new change of omitting weighing in ANC routines. They felt that weighing was still necessary in assessing the growth of the foetus:

It is difficult to do away with that. It is very necessary, since it reflects the growth of the baby. It also reflects the levels of nutrition and the women themselves feel it is necessary. If they come and they are not weighed, they complain. (PF18)

In these circumstances, caregivers avoided the dilemmas they experienced around compliance with new routines by meeting women's requests to be weighed, however, without recording the weight.

Whereas the caregivers in this study were positive to the goals of the proposed changes, which would, among other things, save time for them and the women, the caregivers were paradoxically too stressed in their work situations to implement effectively the recommended changes. The caregivers, moreover, had pressure from the users of care, whose reasoning and rationale for using care were different from those of professionals.

Discussion and conclusions

In discussing the implications of the findings, it is important to point out that, as is common in qualitative research, this study comprised a small sample of caregivers and was not designed to be representative in the conventional sense (Patton 2002). Rather, we sought to explore the ways in which we might obtain a deeper understanding of the meanings, perspectives and experiences as described by the caregivers, leaving the readers to judge the relevance for their own contexts (Guba and Lincoln 1989; Kvale 1996; Polit and Hungler 1999). We also hoped to raise new questions for research or practice.

The paradoxical experiences and dilemmas described by the caregivers in this study and the resistance to change by women users should be understood in the context of the current discourses and attempts within biomedicine to introduce what is now popularly known as evidence-based care. More importantly, the experiences and dilemmas articulate the shortcomings of evidence-based medicine in taking account of the perspectives of different actors, including the users and providers of care in their complex institutional, socio-cultural, economic and political contexts (Trinder 2000).

The critics of evidence-based medicine and participants in the ongoing debates about its practice have argued that, whereas evidence-based medicine has played an important role in promoting best treatment methods as well as helping patients and doctors to make informed decisions (Freeman and Sweeney 2001), its implementation has been hampered by its underestimation of the complexity of social contexts within which change is introduced (Trinder 2000; Crawford et al. 2002). Moreover, evidence-based medicine devalues the humane and social aspects of clinical practice (Lipman 2000). Trinder (2000) recommends that organizational community environments, as well as attitudes and belief systems, should be part of the evidence. Arguing from a similar perspective, Frohlich and colleagues advocate a move from the notion that risk is solely individually determined, to one in which agency, practice and social structure or rules in society are seen as underlying factors (Frohlich et al. 2001).

How caregivers reason around their work situation – their inability to provide care or to implement proposed changes effectively, their frustration, overwork and stress – indicates the way their work situation is constituted by poverty, professional, policy, institutional and cultural discourses and practice. They describe, in other words, the complex ways in which types of knowledge and practice, seemingly running in parallel, nevertheless intersect at the level where they are caring for women, creating a paradoxical situation. These experiences however, seem to follow a general pattern in policy formulation and implementation (Nygren 1999; Lincoln 2001).

The resource constraints described in this study are experienced in Zimbabwe as a whole. For example, the Minister of Finance, in his presentation of the budget

for the 2003 financial year, reported that there are only 742 doctors and 7133 nurses still working in government institutions in Zimbabwe, rather than the 1200 doctors and 12 000 nurses actually required (Chinowaita 2002). A total of 2297 health professionals (77 doctors and 1920 nurses) had left for other countries by the end of September 2002 (Chinowaita 2002) and those remaining obviously had difficulties coping with the workload. This situation also seems to be exacerbated by economic policies and reforms that have been prescribed for many low-income countries, in part to improve access to health care. A number of studies suggest, however, that these reforms have, in fact, left the poor people in these countries even poorer and more exposed to ill health as they are not able financially to access care (Bassett et al. 1997; Loewenson et al. 1991; Cruickshank 2000; Whitehead et al. 2001). The concept of the 'poverty trap' articulated by Whitehead and colleagues, whereby the introduction of user fees has resulted in poor people failing to access the care because of increased medical costs, captures the sentiments expressed by caregivers in this study. The theoretical assumption of user fees based on market economies was that they would raise revenue that could be used to subsidize those least able to afford care, and in the process improve the poorer group's access to and use of health services. Instead, user fees have reduced access to basic health services for the poorer people (Whitehead et al. 2001).

The results of our study illustrate how organizational structures may influence the caregiver–woman interaction. One of the assumed benefits of the new ANC package is that by reducing the number of visits, more time would be available for caregivers to interact with women and thus to provide better quality of care. The caregivers in our study were already too overworked to find time to interact effectively with the women. They were also too stressed to make time to reflect on their top-down interactions. Similar observations were made in a Harare study assessing the attitudes of both users and providers of care to a new ANC package. The new package had little impact on the time made available for consultations. Neither did it have a significant effect on the women's satisfaction levels. The staff, however, wished the women could make fewer visits and were happy with the use of appointments (Murira et al. 1996). In another randomized trial assessing the satisfaction of caregivers and users with a new ANC model in four low-income countries, the providers were reported to be more satisfied with the number of visits, time spent with the patient and the information provided. They were, however, in similar ways to that observed in this study, less satisfied with the spacing between visits (Langer et al. 2002). The caregivers in this study saw no sense in reducing visits for women whose first visit was later than that professionally stipulated. They expressed concern, however, over women who visited the clinic outside the appointed dates. These observations further illuminate the conflicts that could arise between evidence-based medicine and the needs, reasonings or meanings women may associate with certain practices, such as weighing. Such

conflicts have also been reported in another study (Crawford et al. 2002). Even though the caregivers in our study accepted the new changes, they were caught in a system that made it impossible for them to implement the changes.

Besides the discrepancies observed between assumptions in the proposed changes and the experiences of the caregivers, there are also discrepancies with the perspectives of users, which also seem to conflict with assumptions and practices embedded in biomedicine, including the nursing profession. Whereas nursing, including midwifery, is presented as a profession concerned with good quality of care, kindness and the comfort of women (Woodward 2000; Letamo and Majelantle 2001; Petrou et al. 2001), experiences described by women in many studies suggest that professional midwives often treat women with little respect for their needs and concerns (Davies-Floyd 2000). Women have described caregivers as abusive, humiliating and uncaring, and that they impose their control and authority over women (Islam and Nielsen 1993; Wong et al. 1995; Jewkes et al. 1998).

Finally, this study suggests that implementing change might be difficult if it is not based on the realities, knowledge, experiences and perspectives of those implementing the change and those expected to benefit from it. In other words, evidence-based ANC also needs to be based on broader contextual evidence or local knowledge. This seems to be the message from the accounts of the caregivers. Such a process would require a great deal of reflexivity, especially by professionals and policy-makers, in part to create an enabling environment for practice (Patton 2002).

References

- Bassett MT, Bijlmaekers L, Sanders DM. 1997. Professionalism, patient satisfaction and quality of health care: experience during Zimbabwe's structural adjustment programme. *Social Science and Medicine* **45**: 1845–52.
- Berger P, Luckmann T. 1967. *The social construction of everyday life: a treatise in the sociology of knowledge*. Harmondsworth: Penguin.
- Bryar RM. 1995. *Theory for midwifery practice*. London: Macmillan Press Ltd.
- Chimhete C. 2002. High fees drive patients away from hospitals. *The Sunday Mirror* 1–03–03.
- Chinowaita M. 2002. Doctors, nurses in mass exodus. *The Daily News*, Zimbabwe, 20 November.
- Crawford P, Brown B, Anthony P, Hicks C. 2002. Reluctant empiricists: community mental health nurses and the art of evidence-based praxis. *Health and Social Care in the Community* **10**: 287–98.
- Cruickshank CJ. 2000. Report from Nicaragua: midwifery and structural adjustment. *Journal of Midwifery and Women's Health* **45**: 411–5.
- Davis-Floyd R. 2000. Mutual accommodation or biomedical hegemony? Anthropological perspectives on global issues in midwifery. *Midwifery Today* **Spring (53)**: 12–16, 68–9.
- Freeman AC, Sweeney K. 2001. Why general practitioners do not implement evidence: qualitative study. *British Medical Journal* **323**: 1–5.

- Frohlich KL, Corin E, Potvin L. 2001. A theoretical proposal for the relationship between context and disease. *Sociology of Health and Illness* **23**: 776–97.
- Guba EG, Lincoln YS. 1989. *Fourth generation evaluation*. Newbury Park, CA: Sage Publications.
- Hallberg LR-M. 2002. *Methods in public health research: theoretical foundations and practical examples*. Lund: Studentlitteratur.
- Islam MA, Nielsen CC. 1993. Maternal and child health services: evaluating mothers' perceptions and participation. *Public Health* **107**: 243–9.
- Jewkes R, Abrahams N, Mvo Z. 1998. Why do nurses abuse patients? Reflections from South African obstetric services. *Social Science and Medicine* **47**: 1781–95.
- Kvale S. 1996. *Interviews: an introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.
- Langer A, Villar J, Romero M et al. 2002. Are women and providers satisfied with antenatal care? Views on a standard and a simplified, evidence-based model of care in four developing countries. *BMC Women's Health* **2**: 7.
- Letamo G, Majelantle RG. 2001. Factors influencing low birth weight and prematurity in Botswana. *Journal of Biosocial Science* **33**: 391–403.
- Lincoln YS. 2001. Engaging sympathies: relationships between action research and social constructivism. In: Reason P, Bradbury H (eds). *Handbook of action research. Participative inquiry and practice*. London: Sage Publications.
- Lindmark G. 1992. Assessing the scientific basis of antenatal care: the case of Sweden. *International Journal of Technology Assessment in Health Care* **8**: 2–7.
- Lipman T. 2000. Power and influence in clinical effectiveness and evidence-based medicine. *Family Practice* **17**: 557–63.
- Loewenson R, Sanders D, Davies R. 1991. Challenges to equity in health and health care: a Zimbabwean case study. *Social Science and Medicine* **32**: 1079–88.
- Majoko F. 1995. *The New ANC Package – Gutu Study*. Harare: Department of Obstetrics and Gynaecology, University of Zimbabwe.
- Mayan MJ. 2001. *An introduction to qualitative methods: a training module for students and professionals*. Alberta: International Institute for Qualitative Methods.
- Ministry of Health and Child Welfare. 1994. *Maternal health care manual for rural health centres/clinic nurses*. Harare: Government of Zimbabwe.
- Morse JM. 1996. *Qualitative health research*. Newbury Park, CA: Sage Publications.
- Mukumbura R. 2000. Zimbabwe: More people turn to traditional medicine. *Africanews* 18 September; Sect. 1–3.
- Munjanja SP, Lindmark G, Nystrom L. 1996. Randomised controlled trial of a reduced-visits programme of antenatal care in Harare, Zimbabwe. *The Lancet* **348**: 364–9.
- Murira N, Munjanja SP, Zhanda I, Lindmark G, Nystrom L. 1996. Health education for pregnancy care in Harare: a survey in seven primary health care clinics. *Central African Journal of Medicine* **42**: 297–301.
- Ncube J. 2003. With doctors and drugs in short supply, Zimbabwe's traditional healers are coming to the rescue. In: *Orbit* no. 66: [http://www.oneworld.org/vso/pubs/orbit/66/cure.htm].
- Nhindiri P, Munjanja SP, Zhanda I. 1996. Utilisation of maternity services: a community based study of Gutu District. *African Journal of Health Sciences* **3**: 120–5.
- Nygren A. 1999. Local knowledge in the environment-development discourse: from dichotomies to situated knowledge. *Critique of Anthropology* **19**: 267–88.
- Patton MQ. 2002. *Qualitative research and evaluation methods*. 3rd edition. Thousand Oaks, CA: Sage Publications.
- Petrou S, Kupek E, Vause S, Maresh M. 2001. Clinical, provider and sociodemographic determinants of the number of antenatal visits in England and Wales. *Social Science and Medicine* **52**: 1123–34.
- Polit DF, Hungler BP. 1999. *Nursing research: principles and methods* (sixth edition). Philadelphia: Lippincott Williams and Wilkins.
- Sanders J, Somerset M, Jewel D, Sharp D. 1999. To see or not to see? Midwives' perceptions of reduced antenatal attendances for 'low risk' women. *Midwifery* **15**: 257–63.
- Strauss A, Corbin J. 1998. *Basics of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Trinder L. 2000. A critical appraisal of evidence-based practice. In: Trinder L, Reynolds S (eds). *Evidence-based practice: a critical appraisal*. Oxford: Blackwell Publishing Company, pp. 212–41.
- Villar J, Neelofur DK. 1999. Routine antenatal care for low risk pregnancy. Cochrane Database of Perinatal Trials.
- Villar J, Ba'aqeel H, Piaggio G et al. 2001. WHO antenatal care randomised trial for the evaluation of a new model of routine antenatal care. *The Lancet* **357**: 1551–64.
- Walker DS, Day S, Diroff C et al. 2002. Reduced frequency prenatal visits in midwifery practice: attitudes and use. *Journal of Midwifery and Women's Health* **48**: 269–77.
- Whitehead M, Dahlgren G, Evans T. 2001. Equity and health sector reforms: can low-income countries escape the medical poverty trap? *The Lancet* **358**: 833–6.
- Wong GC, Li VC, Burris MA, Xiang Y. 1995. Seeking women's voices: setting the context for women's health interventions in two rural counties in Yunnan, China. *Social Science and Medicine* **41**: 1147–57.
- Woodward V. 2000. Caring for women: the potential contribution of formal theory to midwifery practice. *Midwifery* **16**: 68–75.

Acknowledgements

The authors gratefully acknowledge the contributions of the caregivers who participated in the study. Financial assistance for this study was from the Swedish Agency for Research Cooperation with Developing Countries (SAREC), the Swedish Institute and InDevelop Foundation.

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