

Women's Perceptions and Experience with the Progesterone Vaginal Ring for Contraception during Breastfeeding

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This paper describes part of a qualitative study which explored the acceptability of the progesterone vaginal ring, a new hormonal contraceptive method designed for use by breastfeeding women in the post-partum period, and how and why Chilean women decided to use or not to use it. Seventy-eight women who had selected either this ring or the Copper T-380A intra-uterine device were asked for their impressions through semi-structured interviews and focus groups, either before, during or after they used the method. Method selection was influenced by women's perceptions of advantages and disadvantages of the ring itself, compared with other methods, level of interest in trying a new method, previous contraceptive experience, and quality of care and counselling received. Most women who used the ring found it highly acceptable and mentioned the following advantages: comfort, efficacy, ease of insertion and removal, user's control, safety, no negative effect on sex life, and prolonged amenorrhoea. Nevertheless, some women disliked these same characteristics or had fears regarding them, and a few women had negative experiences such as excessive vaginal discharge or frequent expulsion. This method creates a special opportunity for counselling to help women gain in knowledge and power over their bodies and health.

A CCEPTABILITY studies are a useful instrument to address potential and actual users' perspectives regarding a contraceptive method. This kind of research should include users' attitudes, opinions, fears and beliefs about the method, as well as other factors that may affect those attitudes, such as partner's, relatives' and peers' opinions, quality of care issues, socio-cultural and contextual determinants.^{1,2}

The successful use of a method is largely affected by acceptability issues. Therefore, attitudes and the practical implications that they have for the introduction of any given method in family planning services must be assessed.² The possibility of developing useful counselling, and thus favouring users' satisfaction and successful use depends on adequate knowledge of a method's acceptability.³

Acceptability research with vaginal rings (combined oestrogen-progestogen or progestogen-only devices) shows that women appreciate ease or convenience of use, efficacy, not having to take something daily, and extent of user

control and safety.⁴⁻⁷

The perspectives and particular contraceptive needs of post-partum women are among the least documented.¹ This paper explores the acceptability of the progesterone vaginal ring (PVR), a new contraceptive designed precisely for breastfeeding women in the post-partum period. It describes the women's perceptions of the ring before using it and the factors that influenced method selection; the advantages and disadvantages perceived and experienced during use; attitudes towards the ring's novelty; and quality of care and counselling issues. It is the first acceptability study of this ring that we are aware of. Other topics included in the study were: attitudes of partners, relatives and peers towards the ring, specific counselling requirements for each stage of use, and perceptions of contraceptive need during the post-partum period, which will be presented in future publications.

The PVR is a hormonal method that is placed in the vagina, where it releases the natural hormone progesterone, which is absorbed

through the vaginal wall. It is a white, soft, flexible homogeneous Silastic® (silicone) ring with 22.5 per cent progesterone, which is released steadily. It has an outer diameter of about 58mm and a cross-sectional diameter of 8.4mm. It can be placed anywhere inside the vagina that feels comfortable, and usually sits in the upper part of the vagina. The user can insert and remove it with her fingers, and it can be taken out for up to two hours per day. In the present study it had to be replaced after three months' use, and could be used continuously for up to one year or until the end of lactation, whichever came first. This ring has been tested in clinical trials; it has shown high efficacy, good clinical performance and extension of post-partum amenorrhoea.^{8,9}

Study, methods and participants

The study was undertaken between March 1994 and January 1996 at a private, non-profit family planning clinic at the Instituto Chileno de Medicina Reproductiva (ICMER) in Santiago, Chile. The research team consisted of two psychologists, a social scientist and a physician, all of them women who had no other contact with the participants.

The acceptability study was conducted among 78 out of the 235 post-partum women who participated in a phase III clinical trial evaluating the ring's efficacy and side effects.¹⁰ At the time they entered the clinical trial women were fully nursing, and willing to breastfeed for as long as possible. They were healthy and had no contraindication for either method offered. For the clinical trial, the women were counselled individually on all the methods suitable for post-partum contraception, and were offered the PVR or the Copper-T380A. Those who chose one of these two methods were invited to participate in the trial.¹¹ Women initiated their method around day 60 post-partum.¹² At that time, those who chose the ring were instructed by a midwife on how to use it, and had the chance to practise insertion and removal.

In the acceptability part of the study, a qualitative methodology was used that included semi-structured interviews and focus groups, as these techniques favour the expression of spontaneous opinions, and allowed participants to describe the range of attitudes towards different aspects of the method. The results

enhance understanding of the main issues connected with the method's acceptability, but cannot be generalised to a larger population.

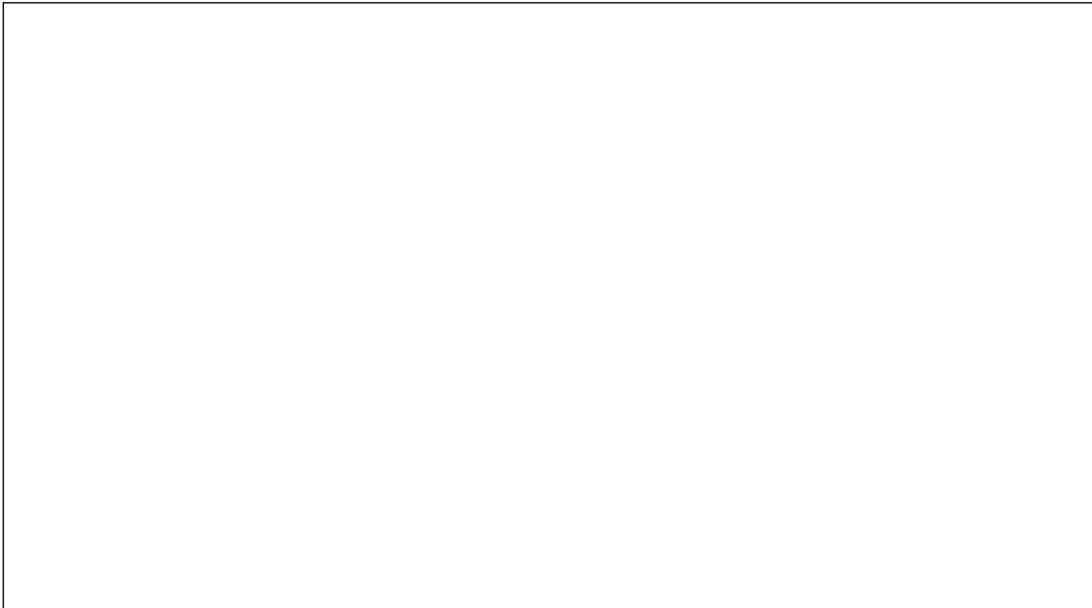
The respondents in the acceptability study were urban lower- and middle-class women, married or in stable union. Their average age was 24.6 years, and the average number of live births was 1.8. Sixty per cent had completed secondary school. One third were housewives and the rest were students or had a job outside the home (and were on maternity leave). The contraceptive methods most frequently used by them previously were the pill and Copper-T380A IUD (the main choices offered at public clinics in Chile). One fifth had never used a method, and a few had used injectables, rhythm, implants, other vaginal rings in a prior clinical trial, spermicides or condoms. They did not differ significantly from the women in the larger clinical trial group in terms of age, parity, education, average duration of contraceptive use within the study and reasons for discontinuation.

Our aim was to explore aspects of acceptability before, during and after use of the ring. Four study groups were therefore planned beforehand: ring selectors, Copper-T selectors, ring users and ring discontinuers.

- Selectors were women in their first month post-partum, who had chosen the PVR (n=17) or Copper-T (n=15) but had not initiated use.
- Users were women who had used the PVR (n=36) for 3 to 14 months (mean = 6.6 months).¹³ All but four of them were using the ring at the time of interview or focus group.
- Discontinuers were women who had used the PVR for 1 to 13 months (mean= 4.9 months) and had decided to stop using it (n=10) for non-medical reasons, mainly discomfort. They were interviewed within two weeks after discontinuation.

Participants were selected by two nurses, on the basis of practical reasons. For the interviews they invited women who were not in a hurry to leave the clinic, preferably those who came with their babies and no other children. For the focus groups, participants were invited because of their previous compliance with scheduled visits to the clinic. The women were all informed of the purpose of the study and most women who were invited accepted to participate.

Each interview was carried out in a private



A progesterone vaginal ring (left) and a diaphragm (right)

office, immediately before or after women received clinical care, and took about 30 minutes. Three focus groups with PVR users of about an hour each were conducted, with four to seven women in each; participants attended the clinic specifically for this purpose. Flexible guides of topics and open-ended questions were used, and women were not prompted with possible answers. Clarifying questions were asked to gain deeper understanding of each woman's perspectives.

Interviews and focus groups were tape-recorded and transcribed with subjects' agreement. Forty per cent of the transcriptions were checked to ensure their accuracy. To safeguard anonymity, each interview was assigned a code for identification. Data analysis was performed by two female psychologists, with the assistance of a physician. The information was coded and classified¹⁴ using the categories and sub-categories identified from what the women said, ie. their attitudes towards a new method, its efficacy, comfort, etc.

Perceptions, beliefs and selection of a new, unknown method

Both ring and IUD groups had positive and negative opinions about almost every charac-

teristic of the ring. Doubts expressed by ring selectors about the ring were typically expressed as negative expectations by IUD selectors.

Ring selectors spontaneously compared the ring to other methods, usually the IUD and oral contraceptives. Most of them had negative feelings about the Copper-T due to their own or other women's experiences. In contrast, most IUD selectors had previously had a positive experience with the IUD.

The fact that the ring has a natural hormone which does not interfere with breastfeeding was highly valued by ring selectors, most of whom were interested in using a hormonal contraceptive.

'I was told here that the ring does not affect breastfeeding at all. With my first child I was given the pill, and it reduced my milk.... The best thing is to nurse as long as the baby wants.'

However, women who selected the Copper-T knew that IUDs do not interfere with breastfeeding, so this was not seen by them as a comparative advantage.

Most ring selectors believed that the ring would be safer for their health than the IUD, since it is not put inside the uterus and therefore it can not 'encrust', migrate to another part of the body, or cause infections.

'The ring is less dangerous than the IUD and it won't go up [into another part of the body].... It is placed more externally, so there are no problems of infection.'

Such beliefs and mistaken information about IUDs, in spite of information given during counselling, seemed to favour a positive evaluation of the ring. Women thought that because the ring is made of flexible material and does not contain copper, it would not produce 'acid' (which they thought the Copper-T did), nor cause ulcers, cancer, pain or discomfort. Another aspect of safety was the limited duration of efficacy of the ring. Women who selected the ring were afraid that IUDs could cause 'some internal trouble' because they are used for a number of years.

Some Copper-T selectors also thought the ring would be safe because it is made of flexible material, the woman herself handles it, and it can be washed. On the other hand, some ring selectors expressed doubts about potential systemic side effects such as weight change and mood variations, or delay in return of fertility.

Some ring selectors valued the greater extent of user control over the ring because this would make them more independent of health professionals. Some Copper-T selectors appreciated the possibility of taking it out for a while every day, which they said would give them a feeling of confidence and might be associated with the popular belief that 'resting' from contraceptives is advantageous.

'...For the person who knows how to handle it, not to have it always inside is an advantage.... I'm not using a method now. And it feels all right, you don't worry about anything.'

Several IUD selectors, in contrast, found the ability or possible need to remove the ring daily or regularly worrying. They were afraid that this would make the ring ineffective, a sign that they had not understood its mechanism of action.

'[The midwife] told me that, if it bothered me during intercourse, I could remove it. But I said: "No, I prefer to use something effective. I won't keep removing and inserting it, no."'

Some IUD selectors feared they would not be

able to handle the ring correctly, and some thought it required too much attention. For them, user control was a negative aspect of the ring. Women who felt this way usually preferred to depend on a health professional's care. Three-monthly replacement and limited duration of efficacy of the ring were also disadvantages for them.

'I may forget to put it back in, or I might remove it and then not be able to reinsert it....'

'But one must replace the vaginal ring, and one must handle it. I found the idea bothersome.... That's why I chose the IUD. They put it in once and it lasts for eight years.'

At the same time, IUD selectors were sometimes ambivalent about the IUD, even while choosing this method: they praised the IUD for being a long-term, provider-dependent contraceptive, but at the same time, some of them valued the possibility that a method could be removed, at least once in a while.

'All methods should be removable.'

One concern raised by both ring and IUD selectors was the potential for discomfort of the ring, particularly because they found it very big and thought of it as a foreign object they would be putting inside their bodies.

'I think it will be uncomfortable, though they tell me it is not. Because of its size... its location. When it is something foreign to the body, one rejects it.'

As efficacy was a vital topic for the women, the fact that most ring selectors did not address the issue of efficacy was rather surprising. Additionally, very few mentioned potential difficulties in handling it. Our hypothesis is that some of them did have concerns regarding these aspects of the ring, (as revealed in the interviews during use), but denied them and/or stressed positive characteristics of the ring as an anxiety-reducing strategy.

Overall, among ring selectors several factors influenced method selection: a positive attitude towards new technology more generally, and/or the perception of certain advantages of the ring itself, the absence of negative information about

it in the community, and their rejection of the Copper-T. The absence of personal experience with the ring was associated with an 'open-minded' attitude.

'[Disadvantages?] I don't know, I have to use it first and then think about that.'

In contrast, among IUD selectors, who had also not used the ring before and who did not know anybody else who had, the ring generated strong feelings of distrust precisely because it was an 'unknown' method. These feelings and their positive attitude towards the Copper-T contributed to the perception of the features of the ring as disadvantages.

The experience of using the ring

Most ring users reported a positive experience with the method, and their initial doubts regarding comfort, efficacy and handling were assuaged during use of the ring. Women described an adjustment period, which included getting used to the odd sensation of this foreign object inside their bodies and learning how to handle the ring appropriately.

'The first day I used it, it was difficult, because I was anxious about touching myself and feeling something inside. I had never done something like that... But then I got used to it, removing it and so on.'

Women also reported a gradual decrease in their initial fears of such things as health problems, pain, inability to handle the ring or method failure (some did not trust the protective effect of breastfeeding).

'...I asked if it causes any problem 'inside', but no, I've been verifying on my own that I have no problem at all.'

While some were highly enthusiastic, however, others did experience various problems. Some initial difficulties were overcome with counselling, and others apparently resolved themselves spontaneously. Nevertheless, certain problems were experienced later on, such as ring expulsion and difficulties with handling.

'The first month was good, the second too, but these days I've had the problem that it keeps slipping out constantly.'

Positive experiences and advantages

Confidence in the ring's efficacy increased progressively during use, as women experienced the absence of pregnancy. Some thought the ring was even more effective than the IUD.

'At first I didn't trust it too much... I thought I could become pregnant. But now, I have realised that it is pretty good, I wish I could use the ring for ever.'

Women usually found the ring comfortable because it is flexible and adapts to the body's shape and movements, so they did not notice its presence. Some reported that they even 'forgot' about it, and had to check whether it was still there.

'I've also had to touch it to check if I've still got it in, because that's the impression it gives, that you don't even have it in.'

In many cases the ring did not bother either women or their partners during sexual intercourse, and if it did, it was easily removed.

'No, it doesn't bother my husband either.... He says he doesn't even feel it.'

They found it convenient since they did not need to remember to take something every day. Most users found the ring simple to insert and remove and quickly learnt to handle it. Removing it when they wanted to was highly valued because both the woman and clinic staff could check its location and condition when desired/required.

'You can feel more confident; people are so afraid of cancer and so on. But you can actually see this one, you can wash it, you can check it's OK.'

This is important since several women believed that IUDs can undergo certain harmful changes: 'You don't know if the Copper-T is in bad condition'.

Control over the ring was also associated with feelings of property, responsibility and autonomy. Using the ring helped some women to overcome inhibitions and discover a new relationship with contraception:

'The ring is something that you manage yourself, it is something of your own.'

'It was quite new for me, because one has lots of taboos with regard to this.... And especially touching your genitals. And the fact that you can insert and remove it, it's quite new. It's beautiful.'

It's as if you were the doctor. They trust you, they give you the kind of confidence the doctor has when she examines you. And they convey that confidence to you. You have to be careful enough to wash your hands when you touch your genitals to remove the ring, then wash, dry and reinsert it correctly.'

Women liked the prolonged amenorrhoea and the need for periodic replacement of the ring for a range of reasons, including comfort, enhanced confidence in its efficacy, prevention of anaemia, hygiene and frequent medical care. The initial perception of safety was confirmed by most users, who experienced no systemic or local side effects.

'With the other contraceptives I have used, I had these intense headaches...but not with this one. So I find this is natural for me, because it caused me no problems.'

Negative experiences and disadvantages

Even if they had a positive experience overall, on occasions users experienced and noticed disadvantages. Some women experienced partial expulsion of the ring, and consequent discomfort and occasionally pain. In some cases, this was a mild problem and they managed to get the ring back in easily. Others were made anxious because they were afraid it was going to slip out completely.

'The problem I have is that sometimes when I'm walking down the street, it slips out a little. Then I have to squeeze my legs together really hard to make it go back in. That's uncomfortable.'

For some women user's control was a disadvantage, because they did not feel at ease touching their genitals, had problems inserting or removing the ring, or feared hurting themselves. A few had forgotten to reinsert the ring, and this raised fears of pregnancy.

'I've never tried to introduce it. I'm scared. So I just push it up with a finger. And sometimes I feel uneasy introducing my finger, because I'm afraid of hurting myself.'

Excessive vaginal discharge and fear of vaginal infections were reported by some users. Nausea, hot flushes, headaches, difficulty losing weight and hirsutism were sometimes attributed

to the ring. In addition, some women wondered if decreased libido was a side effect of the ring, and felt embarrassed to discuss this issue with the health professionals. (Some of these complaints are probably related to breastfeeding).

In contrast to those who liked the prolonged amenorrhoea, several women thought they might be pregnant. Others feared the accumulation of 'bad blood' inside the body. In some cases, if the ring bothered the woman or her partner during intercourse, the women did not like to remove it for various reasons, including fear of infection and pregnancy, because they thought the ring acted locally as a barrier.

'I guess, maybe I'm pregnant. Because the ring slips so fast...And since I don't have my menses, then I don't know if I am pregnant or not.'

'Once it hurt him. I told him the midwife said I could remove it. But I'm scared, I told him, of becoming pregnant. So I don't remove it.'

Fear of pregnancy also appeared near the end of breastfeeding, when some women worried about the decrease in the frequency of suckling episodes.

'She [the midwife] told me that if I breastfed the baby once a day, it was enough. But I try to give her more, to prevent pregnancy....Not all bodies work the same way.'

Women who discontinued the ring experienced some of the problems already described, but in a more severe and/or persistent way: frequent expulsion, excessive vaginal discharge, interference with sex life, requirement of user's responsibility, and in one case of vaginal infection, acute pain.

'The only problem was that vaginal discharge, it was like having my menses the whole month. Uncomfortable...'

The evolution of these problems was highly variable. They began at various stages of use, were persistent or acute, and were tolerated by women very differently (one discontinued the ring after two weeks while another continued to use it for 13 months). In spite of their experience, several discontinuers had a very positive opinion of the ring, and were interested in using it again if the problems they had could be avoided.

Not a new method anymore

Most ring users declared they would like to use the ring in the future because they had a positive overall experience. Some considered limited duration as the only real disadvantage of the ring, and mentioned the need for a contraceptive ring for non-breastfeeding women.

'For me it was great. I loved the ring, and it's a pity it's just for the breastfeeding period.'

Both during and after use, most women were not worried about the ring's novelty. They encountered negative reactions from among relatives and peers, which they understood as reactions of fear and rejection derived from people's lack of information, so these did not change their decision to use the method. Once they were sure about the ring's efficacy they engaged in advocacy for the method. Women frequently talked to other women about the ring's advantages. During this study they also mentioned the need to make it available to the general population.

'They told me I was crazy to use this method... An aunt of my husband didn't trust it because I was able to remove it. She said it wouldn't work. But I said I had used it for six months, and it was working for me.'

'It would be useful for everybody... The ring should be accessible for everybody in the future... It should be a normal method already, like any other one. And physicians should explain everything very well, as they did with me.'

Participants mentioned various factors that would influence the ring's acceptability: willingness to breastfeed, youth, 'body acceptance' of the method, need for a short term method, modern attitudes with regard to women touching their genitals and contraception, and partners' attitude towards contraception.

Quality of care and counselling

Quality of care and counselling proved to be key factors influencing women's satisfaction with the method. Participants evaluated the care received at the clinic in positive terms.¹⁵ Some explicitly connected their selection of the ring to the friendly manner of the staff and the coun-

selling received. Reducing women's doubts and fears through adequate counselling increased the chance that they had a good experience with the ring.

'Even the way they treat you here is different... The midwife who talked to me the first time, she explained everything to me; the characteristics of the ring, its functioning. That's why I felt confident.'

'Because of the way they explained to me, I trusted what she said. So I was never afraid of removing it, of becoming pregnant.'

Nevertheless, we were able to identify some difficulties in client/provider communication, such as the occasional use of technical language, failure to give information at the right time, women's lack of knowledge about their body, and their inhibitions about asking questions. Doubts, incomplete or mistaken information came out frequently during this study (eg. 'What happens if the ring goes up into the uterus? Is it possible?') and some of them had a very negative influence on women's experience with the ring, increasing their fears and influencing them to put up with unnecessary discomfort.

'The first time I removed the ring, it felt as if my whole uterus was going to come out with it....'

Discussion

The progesterone vaginal ring proved to be a highly acceptable method for some women. The high continuation rates in the clinical trial point in the same direction.¹⁰ This study illustrates some of the complexities involved in women's decisions regarding contraceptive technology, as well as the diversity of their perceptions of and experiences with a new method.

The results suggest that counselling about the ring should include specific topics at each stage of method selection and use. Among the most important are: appropriateness of size and material of the ring, mechanism of action, period of adjustment and eventual side effects. Checking users' ability to handle the ring, and helping them to overcome eventual interference of the ring in their sex life are also central issues.

The results also confirm that different women need different methods. Almost every attribute

of the ring was perceived by some women as an advantage and as a disadvantage by others, depending on their personal preferences. Thus, ring selectors underlined method safety, did not like IUDs and were more prone to try something new. On the other hand, IUD selectors had a positive opinion of IUDs, gave more importance to efficacy and felt distrust for an unknown method. Therefore, no contraceptive alone can satisfy the needs of all users, which suggests that an expansion in the range of available methods is necessary.

The study supports previous findings about the critical role that quality of care and counselling play in users' satisfaction with contraceptive methods. Counselling in particular is a delicate and complex task, better understood as a two-way communication rather than an information-giving process.

Women are neither passive nor neutral listeners, though they may seem so sometimes. They have needs and preferences, values and beliefs, that influence their comprehension of information. They are not always able to make sense out of the data conveyed by providers, since they lack basic knowledge about anatomy and physiology. They fill gaps in that knowledge with fantasies, and sometimes frightening ones. They are not aware of those distortions, and do not always have the courage to ask about their doubts.

In addition, they also get information from their peers, the mass media and other sources. Community knowledge and rumours also play an important role: when providers' and peers' messages contradict each other, women are likely to trust or rely on their peers as more valid informants.

Therefore, providers should not assume that their explanations are immediately and correctly understood and accepted, nor that they will be recalled later. Adequate counselling should explore women's perceptions and knowledge, their life situations and needs. It should convey the necessary information, checking how women understand it and addressing any myths (or half-truths) they may sustain. If this is not done, or done poorly, or if women are asked to put an absolute trust in health professionals instead, women will not gain in knowledge and power over their bodies and health.

Furthermore, since relevant information

cannot be delivered all at once, and women experience various doubts and problems at different points while they are using a method, counselling should be ongoing and tuned to women's individual and specific needs.

In the particular case of the progesterone vaginal ring, counselling should take into account the fact that this is a user-controlled method. Some women definitely do not actually like this trait. The fact that the women in our study and many others frequently bear a heavy load of domestic work and responsibilities may contribute to this attitude. They simply do not want to have something else to remember or manage, and this must be respected.

On the other hand, we think that as a user-controlled method, the ring creates a special opportunity to promote women's empowerment. Among the women in this study, fears of being unable to handle the ring were frequently replaced by women's sense of control and property over the method, responsibility for their own health, and autonomy in relation to health professionals. Some women reported that using the ring gave them more contact with their bodies and an increased consciousness about family planning. A sense of pride accompanied this process. For these reasons, the vaginal ring can be a stimulus and a concrete tool for a process of empowerment, given the necessary motivation among women seeking contraception and providers.

This study has various limitations. It was carried out in the context of a clinical trial, and this implies higher quality services.¹⁵ This may also result in biased information, since volunteers in contraceptive trials are usually attracted to the idea of something new and/or are dissatisfied with available alternatives.⁵ In addition, participants were selected for practical reasons rather than through more accepted study procedures.

In the future, acceptability of the progesterone vaginal ring should be addressed in a context where women have more contraceptive options and in typical health service settings. Future research should also include surveys among larger groups of potential and actual users with diverse socio-cultural characteristics.

Because of the multiple issues it raises, the acceptability of new contraceptive technology is a complex issue. Qualitative research in this area

is expensive and time-consuming, and requires an interdisciplinary team, which is relatively uncommon but much needed in the field. Its goal is to capture and describe users' (and providers') perspectives. It is useful only if results are applied to the design and implementation of adequate services and counselling strategies, as well as subsequent contraceptive development. With this in mind, results must be expressed in different languages to reach managers, providers and researchers. These are our aims and challenges.

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11. Women had the choice to attend public sector clinics, where Copper-T IUD, pills and condoms are offered, the IUD being the method used by about 70 per cent of the clients. (R Castro, Chief, Women's Health Program, Chilean Ministry of Health. Personal communication, 1997.)
12. Fully nursing amenorrhoeic women are at no risk of pregnancy in the first 60 days post-partum. To evaluate the impact of contraceptives on breastfeeding performance, the methods were initiated around day 60, when lactation was well established, with the newborns showing a good growth rate.
13. Some women who were still breastfeeding during the use of the fourth ring asked for a fifth one and used it out of the clinical trial protocol.
14. As proposed by 'grounded theory' for open coding. See Strauss AL and Corbin J, 1991. *Basics of Qualitative Research*. Sage Publications, Newbury Park CA.
15. See also Vera H, 1993. The client's view of high-quality care in Santiago, Chile. *Studies in Family Planning*. 24(1):40-49.