ORIGINAL RESEARCH ARTICLE

Reasons for Intrauterine Device Use, Discontinuation and Non-Use in Malawi: A Qualitative Study of Women and their Partners

Amy G. Bryant1*, Gloria Hamela2, Ann Gottert3, Gretchen S. Stuart4 and Gift Kamanga2,4,

Department of Obstetrics and Gynecology, University of North Carolina at Chapel Hill, Chapel Hill, NC1; UNC Project, Lilongwe, Malawi2; Department of Health Behavior and Health Sciences, Gillings School of Public Health University of North Carolina at Chapel Hill Chapel Hill, NC3; Department of Health Policy and Management Gillings School of Public Health University of North Carolina at Chapel Hill Chapel Hill, NC4.

*For Correspondence: E-mail: amy_bryant@med.unc.edu; Phone: +(919) 843-5633

Abstract

The copper intrauterine device (IUD) is a safe, long-acting, and effective method of contraception that is under-utilized in many countries, including Malawi. A unique cohort of women who had enrolled in a trial of postpartum IUD use one year earlier gave insights into reasons for using, discontinuing, or not using the IUD. We conducted in-depth interviews with 18 women one year after they participated in a pilot study of a randomized controlled trial of postpartum IUD insertion, and 10 of their male partners. Women and their partners expressed a strong desire for family planning, and perceived numerous benefits of the IUD. However, fear of the IUD was common among successful users and non-users alike. This fear arose from rumours from friends and neighbors who were non-users. How women and their partners responded to this fear affected IUD adoption and continuation. Key themes included (1) Trust in information received from health care providers versus rumours from community members; (2) Partner involvement in IUD decision-making; and (3) Experience with side effects from short-term hormonal contraceptive methods. Broad community education about the IUD’s benefits and safety, and proactive counseling to address couples’ specific fears, may be needed to increase uptake of the method. (Afr J Reprod Health 2015; 19[4]: 50-57).

Keywords: Intrauterine Device, IUD, Africa, Malawi, Sub-Saharan Africa, Qualitative Research

Résumé

Le dispositif intra-utérin de cuivre (DIU) est une méthode de contraception efficace de longue durée d'action non dangereuse, qui est sous-utilisée dans de nombreux pays, dont le Malawi. Une cohorte unique de femmes qui étaient inscrites dans un procès de l’utilisation du DIU post-partum un an plus tôt ont donné un aperçu de raisons pour l'utilisation, l'arrêt, ou de ne pas utiliser le DIU. Nous avons mené des entrevues en profondeur auprès des 18 femmes un an après leur participation à une étude pilote d'un essai contrôlé randomisé d'insertion d'un DIU post-partum, et 10 de leurs partenaires masculins. Les femmes et leurs partenaires ont exprimé un fort désir pour la planification familiale, et de nombreux avantages perçus du DIU. Cependant, la peur du DIU était courante chez les utilisateurs qui ont eu de succès ainsi que chez les non-utilisateurs. Cette crainte provenait de rumeurs de la part des ‘amis et des voisins qui étaient des non-utilisateurs. Comment les femmes et leurs partenaires ont répondu à cette peur a affecté l'adoption et le maintien d'un DIU. Les principaux thèmes inclus (1) La confiance dans les informations reçues des fournisseurs de soins de santé par rapport aux rumeurs de membres de la communauté; (2) Participation des partenaires dans la prise de décision du DIU; et (3) L’expérience des effets secondaires de méthodes contraceptives hormonales à court terme. Une sensibilisation généralisée dans la communauté sur les avantages des DIU et la sécurité, et des orientations proactives pour répondre aux craintes spécifiques des couples, peuvent être nécessaires pour augmenter l’intérêt porté à la méthode (Afr J Reprod Health 2015; 19[4]: 50-57).

Mots-clés: dispositif intra-utérin, DIU, Afrique, Malawi, Afrique sub-saharienne, recherche qualitative.

Introduction

In Malawi, approximately 41% of pregnancies are unintended1,2. The copper T380A intrauterine device (IUD) is one of the most effective contraceptive methods available3. Promoting this highly effective, safe method of contraception has the potential to decrease the rate of unintended pregnancies, unsafe abortion4,5, and maternal mortality6,7. The IUD is available in Malawi free of charge through the Ministry of Health, but only 0.8% of Malawian women currently use it. Increasing uptake and continuation of the IUD in Malawi requires understanding the factors that influence this use8. Evidence from other Sub-Saharan African countries, including Malawi: A qualitative study of women and their partners...
countries suggests that factors affecting method choice include individuals’ knowledge and beliefs as well as interpersonal, cultural and contextual influences. While conducting a randomized controlled trial of postpartum IUD insertion in Lilongwe, Malawi, our research team recognized that many women declined to have an IUD placed, despite initially planning to receive one. We conducted a qualitative study to examine in-depth the factors associated with IUD use, discontinuation, and non-use among the women enrolled in the randomized trial one year earlier, and their male partners.

Material and methods

This was a qualitative study of women who had participated in a study of postpartum IUD insertion one year prior, and their partners. We obtained institutional review board approval from both the University of North Carolina and the Malawi National Health Sciences Research Committee. Written informed consent was obtained from each participant. Participants received reimbursement for travel.

Women were recruited for the primary study at the prenatal clinic of the Bwaila Maternity Hospital in Lilongwe, Malawi from October 2010 to February 2011. Nurse educators involved with the study educated groups of women attending prenatal care about the IUD. During the session, the study nurse showed models of the IUD, described the insertion process, and explained the benefits of the IUD. Women were encouraged to ask questions. No men attended these initial sessions. Women expressing interest in using the IUD were invited to learn about the postpartum IUD study. The study nurse reviewed the consent with each woman individually. A few women brought their husbands to the clinic to learn more about the IUD and the study.

Eligibility criteria for the primary study included having no history of cesarean or medical contraindication to using the IUD. Post-delivery eligibility criteria included having an uncomplicated vaginal delivery and no evidence of infection. If post-delivery eligibility criteria were met, the woman was randomized to receive the IUD either immediately postpartum, or at 6 weeks postpartum. Initially 115 women enrolled in the study and 49 were eligible to be randomized, but only 30 women received the IUD as part of the study protocol; the remainder either avoided or declined to have the IUD placed. For this qualitative study, all women who gave permission to be contacted after the study were eligible.

We used criterion-based sampling of women from the primary study to select 3 subgroups of women for this study: women who still had the IUD (“IUD user,” n=9), women who had the IUD removed, (“IUD discontinuer,” n=3), and women who never received the IUD (“IUD non-user,” n=7). Women participated in in-depth interviews on their experiences, including the specific reasons for continuing, discontinuing, or not using the IUD, fertility intentions, and partner role in decision-making. We conducted similar in-depth interviews with male partners of the women enrolled in this qualitative study. We interviewed 4 partners of IUD users, 2 partners of IUD discontinuers, and 4 partners of IUD non-users.

Interviews were conducted in private offices by three experienced qualitative interviewers fluent in both English and Chichewa, the local language. All interviews were audiotaped, translated and transcribed. Each interview was reviewed for accuracy of translation and transcription by one author (GH) who is fluent in both Chichewa and English. A codebook including both topical and emergent codes was developed. Data was coded using Atlas.ti.7.1 (Scientific Software Development, Berlin, Germany) with cross-coding of four interviews to ensure consistency and establish validity between two analysts (AG and AB). Disagreements between coders were resolved through discussion. Recurrent themes were identified based on the initial codes. The 28 total interviews with men and women provided enough information for thematic saturation on most topics.

Results

From February to June 2012, 18 women and 10 partners were contacted and agreed to participate in this study. Women’s ages ranged from 22 to 40 years old (mean 28). Most women were not employed outside the home (n=15, 83%), and were married (n=17, 94%). The mean number of children was 2.6. Most wanted one more child in several years; a few wanted no more children. Most women (17 of 18) had used a method of contraception in the past, mostly the injection or oral contraceptive pills. No
demographic information was collected on the men who were interviewed, other than their partners’ information.

**IUD decision-making**

The process of deciding to use the IUD was similar among all participants. Few women had heard about the IUD before they learned about it during prenatal care. Most women who expressed interest in using the method consulted with their partners and reviewed the consent form with them. Partners tended to make the final decision about IUD use. All of the women and many of the men then seemed to hear more about the IUD in the community.

Overall, men were very involved in decisions about family planning. Men either solely decided how many more children to have, or it was done jointly. There was high concordance between women and partners about limiting family size. Both partners and women mentioned wanting to protect the children they have. Men often stressed low financial resources as a reason for spacing or stopping childbearing.

Almost all women mentioned multiple benefits of the IUD, which included being long-lasting, reversible, and convenient. Women often mentioned that the lack of hormones in the IUD would lead to fewer side effects than hormonal methods and allow them to have natural periods. In particular, women who had experienced continuous menses on the injection were pleased with the ability to have regular menses with the IUD. Men also mentioned these benefits, particularly if their partner had previously experienced side effects from other methods.

Regardless of whether they were using the IUD, a pervasive theme that affected decision-making was fear. Almost all of the women expressed specific fears about the IUD. Fears were mostly instilled by rumors they heard about the IUD from relatives or friends who were non-users. The following two users expressed this:

**IUD user, age 30, mother of 2:** The beliefs about the *loop* that the people in my area have are that, the thing looks to be long, so they feel it can hurt them, and again what they hear about how it is inserted, they take it and insert in here [pointing at genitalia] so they can hurt you. So I can say maybe the fear is in the two things…

**IUD non-user, age 39, mother of 4:** …people say that they put it in the genitals, here, yah? so maybe it will pass right through in the abdomen… so how do you remove it? These were my thoughts… and the husband will want to pass there also [during sexual intercourse] so is that possible? Can it not be pushed up and then it goes somewhere else?

A few women and/or their partners believed that the insertion procedure involved an operation. Fear was often reinforced by what was read in the consent form for the original study, which contained basic information on rare risks of IUD insertion, including uterine perforation, expulsion, and pregnancy.

Reasons identified for using, discontinuing, or not using the IUD

We identified three key themes to explain the reasons women chose to use, discontinue, or decline the IUD. The themes revolved around their response to fear and rumors related to the IUD.

Interviewer: Have you ever discussed with anyone regarding any family planning method?

**IUD user, age 40, mother of 5:** Yes, like for me when I had the loop inserted, I was able to tell my friends that there is a family planning method; but some were still commenting that hey, we fear that thing. So I was still encouraging them that no, it just looks like that but when you have it inserted in you, you don’t feel heavy or experience any change in your body, you just stay the way you used to be.

Interviewer: What is it that they said made them fear?

**IUD user:** They said it is fearful to have that thing in your body.

[* Loop=IUD. We keep this vernacular term in the quotations cited in this report.*]

The most common rumors were that the IUD can leave the uterus, migrate to the heart and cause death, and that the IUD impedes sex.

**IUD non-user, age 39, mother of 4:** …people say that they put it in the genitals, here, yah? so maybe it will pass right through in the abdomen… so how do you remove it? These were my thoughts… and the husband will want to pass there also [during sexual intercourse] so is that possible? Can it not be pushed up and then it goes somewhere else?
Bryant et al.

Theme 1: Trust in information received from health care providers versus rumors from community members.

Women who chose to use the IUD and were still using it tended to trust and engage with their health care providers more than non-users. Doing so appeared to allow them to receive more complete information about the IUD and counteract rumors. In particular, IUD users described hearing specific information about how the IUD works, seeing a sample IUD, and understanding insertion. Many IUD users wanted to tell their peers about the IUD to help correct misconceptions. For example, they stressed that they weren’t experiencing any problems with the IUD, and that the insertion process is quick and easy. In contrast, non-users reported believing the negative rumors they heard about the IUD, and appeared to avoid further contact with providers. Similarly, the three women who had the IUD removed heard rumors post-insertion, and did not consult health care providers about their concerns. Initially in the interviews, two of these three women described health reasons (vaginal ulcers; abdominal pain) for removing the IUD. However their partners expressed that rumors were the main reason for removal. None of the women interviewed described seeking out information from IUD users (Table 1).

Theme 2: Partner involvement in IUD decision-making

Among IUD users, all except one woman stated that their partners were involved in and supportive of using the IUD. Partners encouraged wives to seek more information from their health care provider when they expressed fear about the IUD. Two partners of IUD users had proactively gone to the health center with their wives to seek more information about the IUD. When partners were not as involved, fear appeared to drive IUD non-use. Two non-users did not ask their partners. The partners of two non-users asked them to avoid the insertion after reviewing the consent form. For three other non-users, the woman stated that her partner told her not to have it inserted, but the partner reported she was fearful of insertion, and therefore did not have it placed even though he had given permission. None of these partners accompanied the woman to any of her visits regarding IUD insertion. A number of partners regretted not being more involved, saying that they should have sought more information at the health center (Table 2).

Theme 3: Experience with side effects from short-term hormonal contraceptive methods.

Another common theme that emerged among IUD users was that they had experienced side effects in the past using short-term hormonal contraceptive methods. Common problems included leg swelling, continuous menses, and weight loss. Partners also expressed a concern about previous side effects that their wives had experienced, with many wanting to “find a solution.” Such problems led many women and couples to highly value the lack of hormones in the IUD, which appeared to outweigh their fears. In contrast, non-users and discontinuers had not experienced as many problems with previous contraceptive methods. For them, the perceived benefits of the IUD did not appear to outweigh their fear of the method (Table 3).

Discussion

In this study we identified three major themes that either facilitated or discouraged IUD use: trusting in information given by health care providers versus believing rumors in the community, partner involvement in IUD decision-making, and having experienced side effects with previously-used short-term methods of contraception. Addressing all of these themes could lead to increased uptake of IUDs in Malawi.

For example, based on our findings, emphasizing the non-hormonal benefits of the IUD might allow the IUD appeal to a broader audience. Women who had experienced side effects with hormonal methods seemed more open to trying a new method. Women and their partners had a strong initial interest in the method, appreciating that it is long-acting, effective, hormone-free, and would preserve normal menses.

Unsurprisingly, we also found that partners are extremely important in decisions regarding family planning. Most women still using the IUD after one year had strong partner support for using the method. Our findings are consistent with prior research, which has shown that inter-spousal communication and joint decision-making regarding contraception increases use of modern family planning methods12,13. Engaging male partners in broader educational efforts to promote IUD use, such as mass media or...
community outreach initiatives, may facilitate uptake of the method. Messages could also include testimony from male motivators to emphasize that many couples use and trust the IUD. The third theme identified, trusting information received from health care providers versus believing rumors from community members, is the most challenging to address. Despite initial education from health care providers regarding the safety and benefits of the IUD, many participants chose to believe rumors they heard in the community. Other researchers have documented that fear of side effects based on rumors heard in the community is a major barrier to contraceptive use, particularly for the IUD.

Developing strategies to overcome the rumors and fear surrounding IUD use could likely lead to higher uptake. In contrast to the many women participants knew who used oral and injectable contraceptives, only a small number of participants in the study knew anyone who had used the IUD. Suspicion of new and unfamiliar health care interventions is common, and we found this to be true in our study. Addressing fears and rumors could lead to increased use and familiarity, allowing an intervention can become more acceptable to the population. Health care providers could help promote IUD use by providing accurate information tailored to counteract rumors and misconceptions about the method. These messages could target potential IUD users who exhibit more trust in health care providers. Health care providers could also allay couples’ fears through individualized encounters. Pro-active, follow-up counseling with couples could address specific concerns, adequately explain the risks of the IUD, and put risks into context. Providing specific information about how and where the IUD is placed, and how it functions during sex may also help couples decide to use it. Strengths of this study include gaining insight into the experiences of women who had used the IUD, or had the opportunity to use the IUD, for a full year. Including partners’ perspectives also enhances this study. We asked women and their partners not just about their intentions for family planning or IUD use, but about their actual experiences with the IUD. By asking about fertility intentions, experience with other methods, and the decision-making process, we gained a broad understanding of IUD use in this cohort.

Limitations of this study include the social desirability bias inherent in self-report of reproductive health information. We minimized this bias by having highly-trained Malawian staff conduct the interviews in private offices in the local language. We also chose to use in-depth individual interviews as opposed to focus group discussions. The group of women with the IUD removed was smaller than...
anticipated and thematic saturation may not have been reached for reasons that women discontinued the IUD. However, we obtained valuable information from this sub-group that contributed to the overall analysis of the results. As with any qualitative study, our results may not be generalizable, but contribute to
Bryant et al.

a more in-depth understanding of IUD use in Malawi and other countries facing similar challenges.

Conclusion

Increasing copper IUD use in Malawi may require a multi-pronged effort. Specifically, our results suggest that widespread education that engages male partners and highlights the non-hormonal features of the copper IUD could be valuable. Additionally, targeting potential users who tend to trust health care providers with proactive, individualized counseling could be useful. These sessions could provide accurate information that specifically counteracts misconceptions widely-held in the community. Reaching a larger audience could help normalize IUD use, helping reduce its tendency to induce fear and rumors\(^2\). As more women adopt the IUD within communities, the presence of more satisfied users who can counteract rumors may be reassuring and enable more women to adopt the method.

Contribution of authors

Amy Bryant conceived the project and wrote the manuscript. Gloria Hamela, BSoc, MSc.\(^b\) Contributed to the development of the interview guides, oversaw the qualitative interviews, and ensured quality of translation. Ann Gottert, PhD.\(^c\) performed the qualitative analysis and contributed to the writing of the manuscript. Gretchen S. Stuart, MD, MPHTM\(^d\) provided mentorship and guidance in the development of the project and contributed to the manuscript. Gift Kamanga, CO, MSc, DLSHTM\(^b\),\(^d\) provided assistance in the development of the interview guides, training of the interviewers, and writing of the manuscript.

Acknowledgements

The authors would like to thank Jullita Malava, Patricia Wiyo, Cecilia Massa, Grace Phiri, and UNC Project for all of their contributions to this research study.

Competing Interests

None of the authors have competing interests to declare.

Funding

This project was completed with funding from an Anonymous Donor.

Reasons for IUD use in Malawi

Reference

16. The ACQUIRE Project. Revitalizing underutilized family planning methods: Using communications and
community engagement to stimulate demand for the IUD in Uganda. Acquiring Knowledge: The ACQUIRE Project/EngenderHealth; 2008.


Reasons for IUD use in Malawi


27. Paz Soldan VA. How family planning ideas are spread within social groups in rural Malawi. Studies in family planning 2004;35:275-90