

How Family Planning Ideas Are Spread Within Social Groups in Rural Malawi

Valerie A. Paz Soldan

Using data from in-depth interviews conducted between March and June 2002 in a rural district of Malawi, this study explores how family planning attitudes and practices spread among members of social groups. Gender differentials are found in how people determine other group members' practices: Men "knew" about such practices from their observations of others' family size and child spacing, whereas women's knowledge was based on their conversations with other women. The discussion topics relating to family planning also varied by sex: Men spoke about the pros and cons of limiting family size, whereas women spoke in detail about types of contraceptive methods, where to get them, their side effects, and covert contraceptive use. For men and women, the main trigger for family planning discussions was gossip. Whereas, generally, women first heard about family planning at the hospital, men stated that their first source of information was the radio or health-drama group. (STUDIES IN FAMILY PLANNING 2004; 35[4]: 275–290)

The role of social interaction in fertility decline received attention from researchers following Coale and Watkins's (1986) study of the fertility transition in Europe that found a pattern of fertility decline across countries and regions that was associated with ethnic and linguistic boundaries. Other studies in various settings have shown that people's sexual behaviors and fertility ideas are influenced by the attitudes and behaviors of others in their social networks regarding contraceptive use (Palmore and Freedman 1969; Hammerslough 1991; Freedman 1997; Rutenberg and Watkins 1997; Valente et al. 1997; Boulay and Valente 1999).

Social Interactions, Influence, and Learning

Recent literature has focused on two specific aspects of social interactions among network members that may result in the diffusion of fertility ideas: social learning and social influence (Bongaarts and Watkins 1996; Kohler et al. 1999 and 2001). Social learning is defined as the interactions among network members through which they acquire new information about "the existence and

technical details of a new phenomenon," such as contraception (Kohler et al. 1999:2). Watkins and her colleagues (1995) found that women in Kenya talk about family size and contraception frequently, intensely, and in depth, a finding that illustrates this type of social interaction. By means of semistructured interviews and focus-group discussions in a district in Kenya, they documented the extensive amount of information being shared by women regarding contraception—information that helps them learn about and evaluate the possibility of contraceptive use. Another example is Boulay and Valente's (1999) study that examined the associations between discussions of family planning in social clubs and individuals' family planning knowledge, attitudes, and practice. Using data from 2,217 women and 2,152 men interviewed for the Kenya Situation Survey, their results revealed that club members were much more likely than nonmembers to have discussed family planning within their groups as well as with other members of their networks. They concluded that participation in social groups plays a mediating role in the diffusion of contraceptive information and practices.

Social influence moves beyond the process of learning and describes how "individuals' preferences are influenced by the behavior and opinions of others" (Kohler et al. 1999 and 2001:43). For example, Palmore and Freedman (1969) studied the results of the implementation of a family planning program in Taichung, Taiwan. Specifically, they examined two mechanisms related to the process of diffusion of information about family planning

Valerie A. Paz Soldan is Research Assistant Professor, International Health and Development Department, Tulane School of Public Health and Tropical Medicine, Calle Navarra 382, Urbanización Higuiereta, Lima 33, Peru. E-mail: vpazsold@tulane.edu.

through individuals' social networks: discussion about family planning and perceptions of others' contraceptive practices. Using survey data gathered before and after the implementation of the family planning program, they concluded that during program implementation, levels of discussion of family planning did not change significantly, whereas the perceptions of others' contraceptive practices did change. They also found that "what people believed to be the [contraceptive] practice of their associates was more important than how often they talked about family planning with them" (Palmore and Freedman 1969:230). They observed that those who perceived that others in their immediate network were using contraceptives were more likely to start using contraceptives than were those who perceived that others were not doing so.

Another example of the importance of social influence on contraceptive use was illustrated in a study conducted in Cameroon, where 495 women who were members of voluntary associations ("tontines") were interviewed in 1993 (Valente et al. 1997). The study revealed that women who perceived that other women in their tontines were using a contraceptive method were nearly eight times more likely than others to use one (Valente et al. 1997). If a woman was encouraged by her friends in the tontine to use a method, she was nearly 17 times more likely to use a method than were other women in the network (Valente et al. 1997). One interesting aspect of this study is that the data-collection method allowed researchers to gather information from many women in these tontines. As a result, the researchers were able to compare the respondents' perception of other tontine members' use of contraceptives with what those members themselves reported. They found that respondents' perception of other members' use influenced their own contraceptive practice more than whether any other members were, in fact, using contraceptives or not (Valente et al. 1997).

Since Malawi intensified its family planning program efforts in the late 1980s, some men and women have become early adopters of the idea of having smaller families and of practicing contraception. Individuals who are in contact with these early adopters may begin thinking about using contraceptives themselves (Rogers 1995). Social groups provide a potential setting for interactions that can lead to the spread of new ideas, including new ideas about reproductive health practices (Hammerslough 1991).

Using data from in-depth interviews with 24 women and 23 men in a rural district in Malawi, this study explores the role of social learning and social influence in individuals' interactions with other group members. The

topics of the discussions taking place within groups and how these conversations are triggered are also examined.

Methodology

This study was conducted between March and June 2002 in the predominantly (94 percent) rural district of Mangochi in southeastern Malawi (Malawi Government 1999). Mangochi District has some of the lowest education and health indicators in Malawi (NSO 2003). Data from a study conducted in this district revealed that about 50 percent of women and 30 percent of men have never attended school (CSR et al. 2004). Although English is the official language of the district, it is rarely spoken by people living in the rural areas where this study took place. Most people of Mangochi District are of Yao ethnicity, and the main languages they speak are Chiyao and Chichewa (Malawi Government 1999). The principal economic activities in Mangochi are "estate agriculture, livestock rearing, fishing, and tourism" (Malawi Government 1999:xii). The present study was conducted in the eastern lakeshore area, where no tourist facilities exist. Most people in this area earn their living from subsistence agriculture and fishing (CSR et al. 2004).

Until the late 1980s, the Malawian Government had invested little effort in developing or promoting a family planning program. In 1987, however, a quickly expanding population combined with an acute food crisis caused the government to adopt and implement a national policy promoting child spacing (Wheeler 1985; Marshall 1989). The government's policy produced rapid results: In 1983, only one maternal and child health clinic offered family planning services (for the purpose of spacing children); by 1989, 141 clinics were providing family planning services (Marshall 1989). Currently, government facilities offer free family planning services and contraceptives to Malawian men and women. Stockouts of injectable contraceptives occur frequently, however, and in rural health centers, transportation difficulties often cause stockouts of combined oral contraceptives and condoms as well.

The proportion of men reporting their intention to use contraceptives is higher (almost 40 percent) than that of women (26 percent) in the Mangochi study region, but current contraceptive use is higher among women than among men (21 percent versus 18 percent, respectively) (CSR et al. 2004). The most commonly reported methods being used are injectables (5 percent of men and 8 percent of women) and periodic abstinence (5 percent of men and 7 percent of women) (CSR et al. 2004). Reported condom use is low for both men and women (4 percent

and 1 percent, respectively). Men who use condoms often stated that they used them with women who were not their regular partners (CSR et al. 2004).

Despite the limited formal infrastructure of these villages, data collected in this region for a related study revealed that social structures within these communities are well established (Paz Soldan 2003). Formal and informal social groups function as a resource and as networks in the villages. About 30 percent of both men and women in the district reported being part of a social group. The group membership most commonly reported by men was sports (41 percent), whereas among women, the most common type of membership was in volunteer groups (36 percent), followed by religious groups (21 percent) (Paz Soldan 2003). Social groups considered in this study consist of those created and organized in a formal manner (in some cases, those that are chapters of nationwide associations), including political, religious, and work-related groups, and informal groups, such as groups of women who meet to chat as they perform chores or groups of men who travel together regularly to South Africa for work.

Data and Sample Selection

Two research assistants were trained to conduct in-depth interviews with group members in two enumeration areas made up of several villages each. The assistants spent four weeks living in the first area and four weeks in the second. In order to identify respondents for the in-depth interviews, the assistants talked with key informants in the villages to identify existing and active groups in the communities. Among the key informants were village chiefs, group leaders, and other village members. During this process, the assistants documented the types of groups described above, noting such characteristics as their sex composition, frequency of meetings, and number of members. The groups in the villages were numerous and of many types: Political; religious (of various sects); youth; sports (including football among men and netball among women); leadership (including a council group that meets with the chief twice a week, a market group that oversees activities and problems at the market, and a school committee); volunteer (such as funeral groups consisting of gravediggers and funeral cooks); health (including traditional birth attendants and a health-drama group); occupational (such as a fishing group and a group of men who travel together to South Africa to seek work); and informal groups (such as women who fetch water or firewood together and men who play *bawo*, a board game) (Paz Soldan 2003).

The research assistants and the principal researcher selected 16 groups for observation based on sex compo-

sition (some mixed and some single sex), frequency of meetings (to facilitate identifying potential interviewees within the fieldwork timeframe), and type of group (to include a variety). The selected groups were not meant to be representative of all groups of their type, but the sample included the main types of groups observed in the villages. Seven were mixed-sex groups, four were for men only, and five were for women only. With the help of the key informants, the research assistants contacted a member or leader of each group to determine whether the assistant might attend and observe a meeting and interview some of the group's members afterward.

During the group meeting, the research assistants documented the topics of the discussions taking place. Groups were visited only once, but in a few cases the meeting was postponed and the assistant attended the next scheduled meeting. At the end of the group meeting, three individuals were asked to volunteer to answer the assistant's questions regarding their group participation. Respondents had to be at least 18 years old.

A total of 16 groups were visited, and 24 women and 23 men were interviewed. The individual in-depth interviews covered respondents' backgrounds, their fertility ideas, family planning practices, and motivation for joining the group. They were asked whether the group discusses topics related to family planning or other reproductive health issues.

The research assistants explored the possible mechanisms through which group members might learn about other members' family planning and reproductive health attitudes and practices. At the end of each interview, the assistant jotted down his or her own comments, such as whether the respondent seemed to be comfortable or whether he or she seemed to be trying to respond with "the right answers."

Data Analysis

After the in-depth interviews had been translated and transcribed, and 30 percent of the interview transcripts had been checked for quality of translation, a code list was developed using the main themes based on the conceptual model. The interviews were coded manually by two individuals and compared for intercoder reliability (Miles and Huberman 1994). Differences in the coding were discussed by the research team. Most of these differences had to do with interpretation of the codes and what the codes included, so that consistency in coding improved after a few days. In some cases, the inconsistencies were the result of interview data that pertained to two different codes. In these cases, both codes were kept. For about 30 percent of the interviews, the research assistants returned to the respondent for a follow-up in-

interview when sufficient detail on an important topic had not been captured in the initial interview or when contradictory information had to be clarified.

Matrixes were created to categorize and assess the routes by which reproductive health attitudes and practices are spread within these groups (see Appendix Tables A1 and A2 for the matrix of analysis of main themes by sex). Quotations within the transcripts that illustrated the primary issues were highlighted for inclusion in the results section. Although the matrixes constitute an attempt to quantify patterns in the data, the transcripts of the interviews provide a wealth of information from which a deeper understanding can be gained of the types of conversations and interactions taking place in these communities.

In the process of reading and coding the transcripts and developing the matrixes, gender differentials were observed concerning the way information about family planning attitudes and use is spread among group members, and also in the topics of the conversations related to family planning and family size. Therefore, in the presentation of patterns from the matrixes, results are given by sex. Other themes associated with how family planning ideas are spread, such as how discussions of contraception are triggered or how people first hear about family planning, were also examined and are included in the results section below.

Results

As noted above, interviews were conducted with men and women who were part of mixed- or single-sex groups. Findings gleaned from men's and women's responses are presented separately, however, for several reasons. First, the responses show distinct gender-related patterns. A gender differential was observed in how information is spread within groups concerning other group members' family planning attitudes and behaviors. Men seemed to form conclusions about others' attitudes and practices based on their own observations of members' family size and child spacing. In contrast, women rarely assumed knowledge of other women's family planning attitudes or contraceptive use unless they had talked about these topics with them. Second, except in a few instances (for example, in the health group), most of the personal discussions related to family planning that took place within groups occurred between members of the same sex. Although this circumstance may be the result of the more formal nature of mixed-sex groups (such groups may have a set agenda that allows less time than other types of groups for chatting and gossip during the meet-

ing), it also may be a result of respondents' comfort levels. For example, one 30-year-old woman describes this issue:

Interviewer: Of all the groups we have mentioned, in which groups do you feel free to discuss family planning?

Respondent: In this group [formed to obtain loans] we feel free to discuss family planning. The Red Cross group is a combination of men and women, and of course we discuss family planning, but we don't feel free to do so. In the group of loans, we are all women, so we don't have any such problems.

Both men and women reported feeling more comfortable speaking with others of a similar age group. They mentioned that they find broaching these topics when elders are nearby difficult or inappropriate. In a few cases, they said that their elders might yell at them for speaking of family planning. They also felt that talking about such topics with young people around would be disrespectful or harmful. Some women remarked upon the inappropriateness of discussing family planning issues with women who have not yet borne children. One 30-year-old woman described why she did not feel free to discuss family planning issues with the whole netball group: "Because we play with young girls who do not know about delivery."

Men's Perceptions of Others' Family Planning Practice

The analysis of the qualitative data revealed that men's acquisition of knowledge about others' family planning practice was indirect, whereas women's was direct. As noted above, two main mechanisms for spreading knowledge were examined: social influence, as observed by people's perceptions of others' family planning attitudes or use, and social learning, represented by discussions of the topic among group members. Among men, the most common mechanism observed was their perceptions of others' practice. When they were asked about other group members' attitudes toward family planning, men gave a range of responses, but a common response was that some in their group approved of contraceptives and used them and others did not. When probed about how they knew what others did, most men's responses were similar. They inferred that their friends used (or didn't use) methods from their own assessment of their friends' child spacing or family size, as the following exchange illustrates:

Interviewer: What do you think about the behavior of people in your group concerning family planning issues? Do they practice it or not? How do you see it?

Respondent: In this group, they make use of [contraceptives].

Interviewer: Oh.

Respondent: Yes, they use them. Some don't, but most of them do.

Interviewer: Why do you say that?

Respondent: I say so because I know that so-and-so has so many children, so-and-so has two children, and so-and-so has three children. Therefore, you know which family is practicing family planning.

In several cases, with regard to group members who were older or younger (not yet of childbearing age), men responded that they did not know about others' use because no evidence of their practices could be seen. This response reinforces the observation that men gauge others' attitudes or practices according to their perceptions of family size and child spacing. In some groups where men did not know each other well, they remarked that they did not know what others in their group felt because they did not "know [other men's] homes."

As a 23-year-old man who is part of a group who fish together responded:

Interviewer: Do you think in your group that there are some people who use family planning methods?

Respondent: Yes, definitely.

Interviewer: In the group?

Respondent: Yes.

Interviewer: How many do you think?

Respondent: Others are elder to me, but those who are my age do; there are about five people of my age.

Interviewer: You see that maybe they use family planning methods?

Respondent: Yes.

Interviewer: How do you know?

Respondent: I see their families. They were married seven years ago, but they have only two children.

Interviewer: Oh, so you know that they are using family planning methods?

Respondent: Some of my age-mates have one child, others don't.

Interviewer: You conclude that they are using family planning methods?

Respondent: Sure, those who don't have closely spaced children.

When asked whether they ever talk about family planning in their groups, many men said they did. Most conversations about family planning among men focused on discussions (often disagreements) about family size. The arguments that were used in favor of smaller families tended to focus on four main issues among men. The point mentioned most frequently was that they would be better able to care for a smaller family adequately, in terms of feeding and clothing their children. Men also often discussed the mother's and child's health; specifically, they focused on how spacing children would allow the mother to regain her strength after childbirth. The mother's appearance was also mentioned, although less frequently than other issues: Some said that women who do not space their children or who have many children look tired and thin. Some men admitted to admiring the bodies of women who practice family planning. As a 22-year-old man commented, "I heard from friends that the wife gets fat when using [a contraceptive], so I think it's good." In a few cases, men brought up the issue of land use in relation to family size. They pointed out that with the population growing as it is, there will not be enough land or food for all. One of the respondents captured a variety of issues in his response, including the problem of feeding a larger family on a limited income and concern about who will care for children if they become orphans as a result of the high mortality in this region:

Respondent: As I told you, I feel so sorry seeing those other families with lots of children who even fail to drink tea. [Because of the famine, some people who had nothing to eat drank tea.] And the children looked so starved. But if you come to my home and see my two children, you will be surprised. I look like this [not well dressed], but my children eat very well and dress well. The 50 Kwacha [about US\$0.75] I get help my family, but what if I had had ten children? Nothing [I earned] would have been enough for my children, and I would even have had to send them to other homes to seek food.

Look at these well-to-do families: They are rich, but have only, maybe, two or three children. Why, they know that if they die, then the children will have problems. So it's better to have only a few, so other people can help them when the parents die.

Men indicated that **those who disapproved of contraception in their group usually responded in one of two ways: either they abstained from the conversation or walked away** (some men described such men as being ashamed) or they argued that God wanted them to “multiply like the sand,” and they should do as God wants. The comments of a member of the fishing group illustrates the first point:

Interviewer: Are there some people who don't discuss this issue [family planning]?

Respondent: These days, wherever you go, this is the issue.

Interviewer: I am talking about your [fishing] group: Are there some people who don't discuss this issue in your group?

Respondent: Yes, there are. They don't discuss it. If you start jokes, they leave.

Interviewer: Why, exactly, do they do that?

Respondent: I don't know.

Interviewer: Are they bored with it?

Respondent: They are ashamed.

Interviewer: Ashamed because. . . ?

Respondent: Because they have many children. They have problems, but they don't know what to do. What we do [fishing], it's not dependable. You find 200 Kwacha today, [and you have] to find [another 200 Kwacha] after [the first 200 Kwacha] is gone.

Interviewer: Oh.

Respondent: You go tomorrow, you find 20 Kwacha. You can buy a blanket with 20 Kwacha? No, it's 500 Kwacha and upward.

Interviewer: Mmm.

Respondent: Take my daughter: She has six dresses. It's as if I outshine the others. I have one child, others have three children. Can they be [as well cared for]? No.

Discussion Triggers Among Men

The **main trigger** for discussions about family planning, as well as about sexually transmitted infections (STIs) and HIV/AIDS (topics that came up spontaneously in the interviews, especially among men), **was gossip**. Such conversations would often start with comments about a passerby—someone with many children or with many closely spaced children. In the process of gossiping, the group members might comment that she would be better off with fewer children or that her husband must not be able to care for them adequately. As a 42-year-old man in the fishing group explained:

Sometimes we see or hear that in [deleted name] village, a certain woman has sexually transmitted infections. Then we start discussing it. At other times, we see that a small girl is pregnant, and we start discussing family planning. “Look at that girl; she is still very young, and delivering a child can be a problem.” That's how it starts. The story can start from someone we don't know, but can educate us.

A **second significant trigger for discussions of family planning among men was concern about the economy of Malawi, and the difficulty of earning a sufficient income to care for one's family**. Because a famine in Malawi had begun recently, the men would speak about it and about the difficulties they faced in feeding their families and how much more difficult it was for those with larger families. Men's conversations about the state of affairs in Malawi often led to discussions about how they were managing to care for themselves and their families. This conversation, in turn, led to the topic of family size. Thus, concern about the lack of work, economic hardship, and the famine often developed into discussions about family size. As men spoke of their own experiences with or attitudes about contraception, they linked the fact of difficult times to family size. As one man remarked: “To tell the truth, there are many [in this group] who use [birth-control] methods. With this hunger, if you have two or three children, you differ from those having ten children.” Another man spoke in greater detail:

Interviewer: What does family planning mean to you? What are your views?

Respondent: In my view, family planning is good because the past and nowadays are very different. Our fathers used to cultivate and harvest a lot of maize, but nowadays, you can harvest just one bag, so if you have four or five children, that means problems. The government has thought it wise to introduce family planning.

Another less frequently observed trigger for men's discussions of contraception was information provided by a health worker or by the health-drama group.

Discussions of Family Planning Among Women

The first major difference in the types of discussions that women have compared with those men have is that, except in the case of the youngest women interviewed (in the youth group), perception of others' contraceptive use was rarely mentioned. When women were asked how they knew about other group members' attitudes toward family planning, they explained that they had discussed family planning with the women in their groups. When asked how they knew that other women used family planning methods, they explained that they either talked among themselves about methods or saw each other at the health-care facility. Women's responses indicated that they exchange opinions within their groups about such topics as method choices and side effects and that they also meet each other by chance at the health-care facility where contraceptive supplies and information are obtained. Some women reported that they discussed (and often disagreed about) issues of family size with other group members and that many discussions extended beyond considerations of the advantages and disadvantages of family planning, focusing in greater detail on specific contraceptive methods.

As is clear from the transcripts of the interviews, women's discussions of methods were far more detailed and personal than were men's conversations on the subject. For example, when asked, many women knew the types of methods that other group members were using and about their side effects, and they had heard about other women's personal experiences related to contraceptive use. A few also mentioned that other women in the community had come to their homes for help in reading the date of their next scheduled contraceptive injection. Women who used contraceptives would sometimes walk together to the health-care facility or see and talk with each other there. The responses of a 31-year-old woman who plays netball (a popular women's sport in Malawi) describes such a situation:

Interviewer: Can you explain to us the behavior of the people in your group concerning family planning? Do they [approve of contraception] or not?

Respondent: These people who play netball, they approve of family planning.

Interviewer: How do you know that?

Respondent: Because they all use family planning methods.

Interviewer: All of them?

Respondent: Yes.

Interviewer: All of the members in your group are of childbearing age?

Respondent: Some are not of childbearing age, but the ones who are all use family planning methods.

Interviewer: How do you know?

Respondent: Some of us go together to the hospital.

Interviewer: Some?

Respondent: Some who didn't go to school come to me to assist them in checking the next date [when they are scheduled] to go to the hospital. When I check, I tell them the day they are supposed to go. So I know that these women are using family planning methods.

Like the men, the women interviewed also remarked that some of the discussions in their groups regarding family planning had to do with disagreements about whether people should use contraceptives. Also, like the men, some women assessed other women's attitudes about family planning according to whether they participate in the discussions of the subject or walk away from such conversations. Women's arguments in favor of contraceptive use focused on their having time for themselves or time to rear their children. They viewed contraception as helpful for a mother's and her children's health. The netball group member explained:

Interviewer: In your netball group, have you ever discussed family planning?

Respondent: Yes, we discuss family planning—that we should practice family planning. If we have children closely spaced, we won't be able to play netball because we will be busy with the children, and . . . we will be losing lots of blood and won't have energy to play netball. We need to space our children by three years so that they grow up healthy and so that we are able to play netball to keep fit.

Reasons women gave for being opposed to family planning included the idea that childbearing should go according to God's will (a reason some men gave also).

They also mentioned their **fear of negative contraceptive side effects**, as described in the interview quoted below. Another issue that came up among women was covert use of contraceptives. Several mentioned the **problems women may face if their partners discover that they are using a method—from disapproval to divorce**. A lengthy response from a 26-year-old political group member is provided here because it includes mention of several of these issues:

Interviewer: Can you tell me the attitudes of people in the UDF [political party in power] group concerning family planning methods?

Respondent: Some approve of them; others do not.

Interviewer: How do you know?

Respondent: We know because some, those who approve of them, use family planning methods.

Interviewer: How do you know?

Respondent: We meet at the hospital or when we are together, and we talk.

Interviewer: What do you talk about?

Respondent: We agree that when you are using a method, things are all right, and you are productive at home. You are not too busy. You are free. When you are giving birth now and again, you do not have enough time to do household chores or take care of your other children because you are tired all the time.

Interviewer: How about those who say that they don't approve of contraceptives?

Respondent: When those who practice family planning experience problems, those who do not approve of using a method say, "then why are they looking like that?" . . . Some, when they are injected, don't give birth again. Some, when they are injected, have heavy periods. They encounter different problems. So when women see those [side effects] among others, they are afraid that if such things are happening to others, they might experience [those side effects] themselves. Some men see that their wives are not giving birth, and most men do not allow that, so most of us conceal that we are practicing family planning. When you try to conceal [method use], your husband gets to know about it, because when you want to become pregnant, you don't do so on time . . .

Interviewer: So when the man gets to know, what is the aftermath?

Respondent: Some, when they realize it, say to you, "If you continue using [a contraceptive], I am going to divorce you." Some will just look at you . . .

Interviewer: Do you have friends who conceal their family planning practice from their husbands?

Respondent: A lot . . .

Discussion Triggers Among Women

The **main trigger for discussions about family planning that women reported was gossip**. As was the case among men, a conversation may be initiated as a product of gossip about a passerby or about someone in the village. Women also spoke of teasing or chiding each other about their reproductive health behaviors. Some women in the sports and religious groups said that such discussions were triggered when other women in their group encouraged a friend to use a family planning method so that she would have time to participate in group activities. (Men did not mention this sort of trigger.) Having many or closely spaced children clearly has a more direct impact on women's than on men's participation in group activities.

Although discussions about the state of affairs in Malawi also seemed to trigger some of the women's conversations about family planning, this trigger was less frequently mentioned by women than by men. The comments of another netball group member, aged 29, captures what many women said about initiating family planning conversations within the group:

Interviewer: How do you start the discussions [about family planning]?

Respondent: We start when somebody is passing by and is carrying a child and is also pregnant.

Interviewer: Mmm.

Respondent: Then we say, "Look at that one." And others say, "Iiich, we cannot do that. These days there is family planning. Where is she? Can't she listen to the radio [and hear] that there is family planning?"

Interviewer: Mmm.

Respondent: And even at the hospital they talk about it. They say everybody is free to practice family planning, even women who don't have a child are free to practice it. When the time

comes that you want another child, then you are also free to stop using the method.

The Role of Social Groups

The idea that social groups can provide an opportune setting for the spread of contraceptive information is not self-evident. Determining whether participation in a group provides a better opportunity for dissemination of these ideas than that provided by simply living in a community is difficult. Some respondents, however, spoke of the amount of time people can spend together and mentioned that, in some groups, people of diverse backgrounds who do not commonly spend time together meet for a shared activity. For example, an 18-year-old who is part of several groups, including a bawo group, describes how his participation exposes him to different views, which he shares with others:

Interviewer: In which group, the youth club, the bawo group, or the other groups [that you belong to], do you feel free to speak your mind?

Respondent: In the youth club.

Interviewer: That one?

Respondent: Yes, that's where I feel free, and I raise strong points.

Interviewer: Yes?

Respondent: Yes. Even my friends are impressed with my ideas.

Interviewer: Why do you feel free in this group?

Respondent: Because I collect all the ideas I get from the other groups where we meet with elders.

Interviewer: And you take these ideas to your friends?

Respondent: That's it. I take them all and tell my friends. Together we discuss them and try to put them to use.

Some respondents mentioned that the location of the group meetings is conducive to triggering certain conversations. Specifically, those groups who meet near a road or near the village center or market are more likely to have a constant stream of people to gossip about, a situation that leads to an exchange of ideas.

Gender Differences in Learning About Contraception

The way in which men and women first learned about family planning differs according to sex, as the inter-

view data show. Many men first heard about modern family planning methods from the radio, from a health-care worker, from the health drama, or from friends, whereas most women described first learning about modern methods from providers at the health-care facilities while they were obtaining antenatal or postpartum services. Women also reported first hearing about family planning from the health drama and from friends, and, among those who attended school, a few mentioned that they had heard about it in school. In only a few cases did women mention the radio as a source of information about family planning, whereas men did not often mention health-care facilities as their first source of information (although some mentioned the community health-care workers).

One final theme that emerged more often in the men's than in the women's interviews is the role of the group in monitoring men's sexual behavior and discouraging promiscuity. This aspect of the group's influence may reflect the fact that men sometimes travel together as a group, whereas the women's groups are more stationary. While traveling, some men may be tempted to engage in casual sexual relations with women and may be restrained by the group's influence. Male respondents also explained that the group occupies their time and energy, keeping them from engaging in promiscuous behavior and extramarital affairs. Men stated that they often watch out for one another, keeping each other safe in the company of strangers and reminding each other of the dangers of promiscuity.

A fishing group member explains:

Interviewer: In the group, you start talking about the people who come from the hospital to talk to the village, and then this leads to family planning discussions?

Respondent: Yes, that is so. After the group discussions, we go out and start telling each other to refrain from promiscuous behavior. Then we start talking about family planning. We say we should stay out fishing for 20 days without seeing our wives, and when we go home, we should use a condom. That's what we discuss.

Interviewer: You tell each other that as friends?

Respondent: As friends, we love each other very much; we act as if we were born of the same mother. We tell each other that we have come to make money, not to sleep around with women. We can stay out fishing for a month, and we come back without anyone of us getting sick, just working together.

Social Interactions in Health-drama and Youth Groups

The village health-drama group and the youth group were formed with the purpose of discussing and disseminating reproductive health information in the community. Thus, the way information was shared in these groups differed from the way it was shared in the other groups: In these two groups, reproductive health was the primary topic during meetings, despite their mixed-sex composition. In the village health-drama group, the members talked extensively about reproductive health issues and expressed a sense of responsibility to practice what they preach to others. One health-drama group member described the temporary suspension of another member who had produced closely spaced children. The group members felt that this individual was setting a bad example for the community.

Unlike the other groups, in which people usually spoke about these issues with others of their own sex, the discussions in these two groups were held between men and women. The health-drama group members also mentioned that people from the community often come to them for information about family planning and other health-related topics, because the group members live in the villages where they present their plays. Because of their role in spreading information, they felt they needed to know as much as possible about reproductive health in order to be a useful resource for their communities.

The youth group also stood apart from the other groups because those involved seemed to have less personal experience of the issues discussed. The group presents plays to peers about family planning and AIDS and about other health topics. The members sing songs about AIDS and about not being promiscuous, and they participate in other activities together. Some members stated that they knew of group members who use contraceptives from having had conversations on the topic. Their responses tended to focus less on their own or their friends' personal experiences and more on what they have heard and learned in the group. The group serves as a setting where they are exposed to these ideas, but their limited personal experience inhibits discussion about their own attitudes and practices with regard to family planning.

Discussion

The main findings from this study suggest that men and women learn in different ways about others' fertility and family planning attitudes and practices, and that gender shapes the way individuals speak about family planning. Men appear to assess others' family planning atti-

tudes and practices according to their observations of the child spacing and size of others' families. Women chat: They discuss why they should use a method, what method to use, the side effects of various methods, and how to conceal contraceptive use from a nonsupportive partner. Although some men discuss methods and some women assess others' contraceptive attitudes and use according to their observations of family size and child spacing, they are the exceptions.

Because contraceptive use is largely controlled by women (even when the decision about whether to use a method is made as a couple), and because women experience the side effects to health of having several closely spaced pregnancies and the side effects of their chosen contraceptive, gender may have a considerable effect on the spread of contraceptive information. As women adopt diverse family planning methods, it makes sense that they would discuss their own experiences with one another, including personal details or information that they find inappropriate to share with men. But do men and women differ in their adoption of other innovations related to reproductive health or to health in general? In what way does gender affect the manner in which innovative health-related information, attitudes, and practices are spread? In the case of family planning methods, the gender differential observed in this study may be the result of women's particular concerns mentioned above. A striking aspect of the data, however, is that women who reported not talking about family planning within their groups or with their friends rarely attempted to guess at their friends' or fellow group members' practices, whereas men reportedly knew about others' contraceptive use or attitudes from deductions based solely on their observation of others' family size or child spacing. Many men did, in fact, report talking with each other about family size, but when asked about their friends' practices, they did not refer to their discussions with others but rather reported what they had observed.

The findings reveal that an exchange of ideas occurs within various kinds of social groups, but operates differently by sex. Women may use these settings to discuss issues that they are trying to work through, to confirm what they know about family planning, to evaluate what they think, and to determine how their views relate to those of other women in their communities. As Rutenberg and Watkins (1997) point out in their study conducted in Kenya, women do not make decisions with regard to contraceptive use during one counseling session, but rather use their interactions with their network members to exchange ideas and work through concerns or issues. They suggest that family planning "programs could benefit by creating bridges that link the formal channels with

informal gossip networks in the community" (Rutenberg and Watkins 1997:303). In this study, these social groups were found to function as sounding boards for individuals, and family planning programs could consider building such bridges with existing social groups.

Evidence of gender-related differences was found as well with regard to how people first learn about family planning, a finding that has programmatic implications. Men most frequently mentioned the radio, the health drama, health workers, and their friends as their sources. By contrast, most women described first learning about contraception during their antenatal care visits at the hospital, from the health drama, and from their friends. Several explanations can be advanced for these differences. First, radio ownership may be more common among men: If a family owns only one radio, most likely the men have most frequent access to it. Radio messages may also be presented in Chichewa (the language spoken most commonly in the central and southern regions of Malawi) rather than in Chiyao (the language of the Yao ethnic group). More men than women are fluent in Chichewa in this region because they tend to travel more frequently and tend to have had more schooling than women. Obtaining antenatal care and delivery may be many women's first significant interaction with the health-care delivery system. About half of the women interviewed had had no schooling, so their antenatal care visits may have been their first major exposure to a formal government system of any kind. Although many women reported that they heard about family planning from many sources, a hospital conversation may have been the first structured discussion they had ever had on the topic, and it probably made a strong impression on their understanding.

Several lessons can be learned from this study that have programmatic and policy implications: First, the health-drama group was reported as the first source of information for many of those who lived in the first enumeration area, or at least it was the most memorable source (no health-drama group existed in the second area studied). Such a group is a feasible and low-cost intervention that could be implemented and promoted for family planning, STI/HIV prevention, and other health topics, as is happening in a few villages. This study revealed that discussions about family planning usually were not formally introduced in group conversations, but that frequently, among both men and women, they were initiated by gossip. Clearly, dramas can serve as triggers for such discussions within social groups and in other informal networks.

The health-drama group members emphasized how seriously they see their own function in the community as a role model for others. They feel that they must be

informed on the health topics they present because community members speak with them after performances and at other times because they are understood to be knowledgeable. They are a village resource that can play a critical role in several stages of contraceptive decision-making or adoption of other health practices.

Second, because antenatal visits are reported as a source of information by many women, continuing to provide discussions about family planning at health facilities during antenatal care is important. Formal community presentations of contraceptive information that are open to women before they become pregnant for the first time could help delay childbearing (and potentially protect women from sexually transmitted infections, including HIV/AIDS), if women are enabled in this way to learn more about their options. One aspect of presenting such information that would have to be explored carefully is the public communication of information about this sensitive subject to village people who have not experienced childbirth. The interviews revealed that some topics are considered inappropriate for the young and for those who have not given birth. Many adolescents have not had a child but are sexually active. Therefore, determining the socially appropriate age level for receipt of contraceptive information is important. Some indicators suggest that, in fact, these topics are being discussed in the youth groups and are being presented to everyone attending the health drama, with community approval. Clearly, these formal presentations are followed by informal discussions among women and among some men as they socialize. Ensuring that people can obtain adequate and accurate follow-up information as they process what they have learned from one another is crucial. In Rutenberg and Watkins's (1997) study, the authors point out that women share information and fears about contraceptive side effects and also want to hear about the experiences of women they relate to.

Third, this study shows that in men's discussions, participants focus less on contraceptive methods than on the overall pros and cons of having smaller families. Radio messages, from which men obtain much of their family planning information, could, therefore, target the issues most relevant to men. Further research is needed to determine why radio broadcasts are more commonly reported as information sources among men than among women. If current broadcasts present a language barrier for women, radio messages could be delivered in other local languages in addition to Chichewa.

The study's findings suggest other programmatic implications that apply mostly to men. First, men talk about STIs/HIV among themselves. According to several respondents, they discourage each other from pro-

miscuous behavior for health reasons. Interventions that encourage men to discuss STIs/HIV could trigger more conversations and potentially lead to wider adoption of healthy behaviors. Several men (and a few women) mentioned that participating in social groups gave them a healthy outlet for their time and energy; it kept them out of trouble. Encouraging and promoting the formation of more and varied recreational groups could be useful. In a country with a high HIV/AIDS prevalence and low condom use, one finding that should be examined thoroughly is the importance of men's perception that other men are using condoms. Ways to increase this perception should be explored. If men realize that others in their village are using condoms, might they feel compelled to use them also?

The Study's Limitations

The difficulty in obtaining unbiased and accurate responses to questions related to sexual and reproductive behaviors is well documented and is a limitation to this study (Fenton et al. 2001; Zaba et al. 2002; Nnko et al. 2004). During some interviews, respondents clearly felt that "right answers" exist, and they gave responses that they felt the interviewers wanted to hear. This problem was particularly evident in interviews with some of the elders and leaders in the community who enthusiastically explained that family planning is always discussed in their groups. Their responses did not coincide with the research assistants' observations during the group meetings nor with the responses of other group members. Some respondents contradicted themselves during their interviews. For example, one woman stated she wanted no more children and later described traditional practices she uses to help her conceive again. In some cases, the respondent was interviewed a second time in an attempt to clarify contradictions, and, when necessary, the researchers worked together to determine which response was accurate.

Contradictory responses and attempts to answer correctly may be the result of several factors. First, the respondents were drawn from those who volunteered to be interviewed, people who may have differed systematically from the other group members. They may have been the most confident and educated of the group and, possibly, the most exposed to outsiders and, therefore, the most willing to speak to the research assistants. A range of ages and educational levels is represented in this study sample. Only about half of the women in these villages have had any schooling; therefore, at 66 percent, women with some schooling are overrepresented in the sample.

Second, some people who were interviewed may have been trying to impress the two research assistants who were urban, college-educated individuals in their mid-

twenties and whom the village respondents may have viewed as progressive and modern. The messages from the Malawi Government are supportive of family planning for child spacing and reducing family size, and many villagers are aware of these messages. In fact, some of the village social groups were organized for development purposes by the government in coordination with the village chiefs, with objectives directly related to improving awareness of limited natural resources. Thus, those who volunteered to be interviewed are likely to have tried to paint the most positive image of their groups and, to that end, spoke enthusiastically about behavior they thought the research assistants would approve of and respect.

Third, a few individuals remarked that people who disapprove of family planning "are socially backward" or "agree with our elders' views." Such comments indicate that family planning is considered a modern behavior, and some respondents may wish to identify themselves with modern ideas. One male respondent quoted above commented that wealthier individuals have fewer children than do those who are poorer, and apparently justifies his decision to limit his family size by associating himself with the behavior of the wealthy. Several respondents are likely to have exaggerated their positive views of family planning in order to associate themselves with the practices of those whom they admire. For example, several respondents who spoke positively about contraception were not convinced that they should practice it themselves. Moreover, although many men responded with favorable opinions of family planning, many of the women interviewed commented about their own and other women's covert use of contraceptives, which may indicate a discrepancy between what some men said and what they really feel and do.

Conclusion

In resource-poor countries with limited infrastructure for providing health education and services to their populations, understanding how new information and ideas about health are spread within the population can provide valuable information for developing and implementing public health interventions. This study describes gender-related differentials in the manner in which men and women assess other group members' family planning attitudes and practices, in what they discuss concerning family planning, and in how they come by their information about contraception. Program policymakers and planners may find these differences useful in designing programs to advance the spread of contraceptive information.

Appendix

Table A1 Matrix of main themes mentioned by female interview respondents, Malawi, 2002

Type of group/ sex composition	Characteristics of respondent/ education attained	Contraceptive use/ how first learned of family planning (FP)	Perception of others' FP method use	Discussions related to reproductive health
Youth club (school- related)/mixed	Aged 18, no partner, no children/eighth grade	Not using/learned of FP from relative who is a health- surveillance assistant.	—	Whole group discusses FP advantages and AIDS prevention theoretically. Personal use/attitudes discussed among good friends and by gender (knows girls in group who use injectables who told her they do; does not know if any boys practice FP).
Youth club/mixed	Aged 18, no partner/ eighth grade	Not using/learned of FP from health-surveillance assistant.	—	Whole group discusses FP advantages and AIDS prevention theoretically. She perceives individuals' positive attitudes based on discussions.
Food for work (works in exchange for food from government)/mixed	Aged 23, has boyfriend, one child/eleventh grade	Uses injectable/learned of FP from health group who visited school.	—	Group discusses methods, personal use, pros/ cons of methods. Only friends within group share more personal information.
Food for work/mixed	Aged 38, married, three children/second grade	Uses the pill/learned of FP at antenatal care visit.	—	Only some female members discuss FP problems, method types, where they go to obtain methods (they see each other at hospital).
Health drama/mixed	Aged 25, married, two children/eighth grade	Uses the pill/learned of FP at antenatal care visit (reinforced by drama group).	Observed others' child spacing	Members encourage each other to be role models for community. She knows method used by some members. Sees some members at hospital. Group discusses FP and AIDS theoretically with same- sex members when sharing personal information.
Health drama/mixed	Aged 29, divorced, has boyfriend, four children (all deceased)/fifth grade	Uses the pill/learned of FP at antenatal care visit (specifics from drama group).	—	Whole group discusses FP side effects, misconcep- tions. She knows of some group members who use. Sees them at clinic or walks with them to get FP services.
Informal (fetch water together regularly)/ women	Aged 34, married, eight living children, four deceased/no schooling	Not using (periods stopped but wants more children)/learned of FP at antenatal care visit.	—	Sometimes all, sometimes only some in group discuss FP, misconceptions, pros/cons (for mother's and child's health). Seems to know who in group uses FP.
Informal/women	Aged 35, married, four children/second grade	Not using/learned of FP at antenatal care visit.	Observed others' child spacing	Whole group discusses FP pros/cons (airs dis- agreement on attitudes toward FP), method types. Some in group practice FP, and she knows their method types.
Informal/women	Aged 28, married, five children/second grade	Not using/learned of FP at antenatal care visit.	—	Whole group supposedly talks about advantages of FP, but she states that none uses a method because all have difficulty becoming pregnant, including herself; has misconceptions.
UDF political (group 1)/mixed ^a	Unsure of age, married six children, no schooling	Uses injectable (wants TL)/ learned of FP at postnatal care visit.	Observed others' child spacing.	Whole group discusses FP theoretically, advan- tages of FP (especially during famine when it allows them to work in exchange for food). They encourage each other, discuss AIDS-avoidance behaviors.
UDF political (group 1)/mixed ^a	Aged 40, married (second husband), two children/no schooling	Had TL after ectopic pregnancy/ learned of FP from radio and friends discussing "hospital chat."	Says "I can't know what is on their minds."	Group does not discuss FP, but she knows there are differing views of it.
Rural finance (credit group to obtain loans)/mixed	Aged 43, married, one child/fifth grade	Used injectable; had TL/learned of FP from home health visitor and at hospital.	—	Discussion limited within group; some discuss FP pros/cons, modernity of method; disagree about use.
Dancing (meet to dance on Thursdays)/women	Aged about 45, married, one child, fecundity problems/no schooling	Not using (wants more children)/ learned of FP at hospital and from radio.	Says she cannot know about others' FP use "if we never talked about it."	Some who are older discuss pros (health, problems with famine), method types (knows friends' methods). See each other at hospital and on walks home from dancing.
Dancing/ women	Aged about 30, married, three children/no schooling (may not be regular member)	Not using (wants more children)/ learned of FP from radio and friends.	Does not know because they have "never discussed it."	Group does not discuss FP.

(continued on next page)

Table A1 (continued)

Rural finance/ mixed	Aged about 35, married, three living children, one deceased/no schooling	Had TL/learned of FP at health center (at under-five clinic).	—	Contradictory response: Says all discuss FP, but later mentions that only some women talk about pros/cons of large families, modernity.
Netball/women	Aged 31, married, three children/eighth grade	Uses injectable/learned of FP at first delivery.	—	Only women of childbearing age discuss FP pros/ cons, misconceptions, advantages, where to go for FP.
Netball/women	Aged 30, married, two children/completed high school	Uses injectable/learned of FP in biology class at school and at hospital.	—	Members talk openly (know each other well, meet frequently). Discuss FP experiences, side effects or problems; some disagree.
Netball/women	Aged 29, married, four children/eighth grade	Uses injectable/learned of FP from radio and at hospital.	—	Do not all talk because some disagree, but discuss FP openly because group is all women. Discuss method types, pros/cons.
UDF political (group 2)/mixed ^a	Aged 26, married, three children/eighth grade	Uses injectable/learned of FP at hospital from health workers.	—	All discuss family size; FP pros/cons, side effects, problems, covert use, where they go to obtain methods.
UDF political (group 2)/mixed ^a	Aged 35, married, five children/no schooling	Uses injectable/learned of FP at hospital.	—	Contradictory response: She says all members discuss FP; later says only women discuss it before meeting begins. Encourage each other, talk about method types (she knows friends' methods). Discuss AIDS-preventive behavior.
Funeral (cook for funeral gatherings in the village)/women	Unsure of age, widowed, six living children, three deceased/no schooling	Used injectable, had TL/ learned of FP at hospital.	—	All group members encouraged her to get TL for health reasons, but since they are all older, they do not practice FP or talk about it otherwise.
Fisheries (organized by government to prevent overfishing)/ mixed	Aged 28, married, three children, pregnant/ fourth grade	Used injectable/learned of FP from health workers who visited village.	—	Some who are friends discuss FP and women discuss it, not as a group, but before or after meet- ing. Discuss method types. She knows some wom- en friends' methods. They discuss advantages.
Fisheries/ mixed	Aged 30, married, two children/second grade	Never used (husband lives in South Africa, so she does not see him often)/learned of FP from friends.	—	Female members talk about FP before or after meeting, but not with men present. Discuss advantages of methods.
Religious/ women	Aged 43, widowed, seven children/fifth grade	Used the pill and injectable, had TL/learned of FP from health workers at home and at hospital (at under-five clinic).	Has not seen anyone with closely spaced children in group.	Whole group discusses FP advantages (family size), method types, changing methods (she knows friends' methods); encourage each other (so have time to pray). Discuss AIDS prevention and talk to community about it.

TL = Tubal ligation. — = Not applicable. ^a Separate UDF political groups were formed for each of the two villages where interviews were conducted.

Table A2 Matrix of main themes mentioned by male interview respondents, Malawi, 2002

Type of group/ sex composition	Characteristics of respondent/ education attained	Contraceptive use/ how first learned of family planning (FP)	Perception of others' FP method use	Discussions related to reproductive health
Food for work/ mixed	Unsure of age, married, seven children/no schooling	Uses traditional method with wife, condoms with nonregular partner/learned of FP from drama group.	Observes others' child spacing.	Only some of the men discuss FP, not as a group. Members do not talk about personal use; overhears women talking among themselves. Indi- viduals discuss FP advantages, danger of AIDS.
Food for work/ mixed	Aged 40, married, six children/eighth grade	Uses condoms/learned of FP from radio and from drama group.	Observes others' child spacing and family size (some do not have children yet, so he suspects they use).	Whole group discusses FP advantages, method types, AIDS prevention.
Youth club/mixed	Aged 18, unmarried, no children/eighth grade	Used condoms/learned of FP from radio and from drama group.	Deduces use from attitudes of peers when they talk of FP, but does not "know."	Discuss FP theoretically as group, and sometimes those who are older discuss details with each other. He has heard girls talk about FP. Group discusses method types, family size, AIDS prevention.
Youth club/mixed	Aged 28, married, one child/teacher's college	Wife uses injectable/ learned of FP from radio.	Deduces use from attitudes expressed, but does not know (except when he observes some boys obtaining condoms).	Whole group discusses FP theoretically, but not personal use. Discusses advantages, AIDS prevention.
Health drama/ mixed	Aged 32, married, two children/third grade	Uses condoms and wife uses injectable/learned of FP from a drama group in city.	Observes others' child spacing (group discusses).	Whole group discusses FP advantages. Members encourage each other by example; discuss AIDS prevention.

(continued on next page)

Table A2 (continued)

Health drama/ mixed	Aged 36, married, five children/tenth grade	Uses condoms/learned of FP from radio; learned details when he joined drama group.	Observes child spacing of members' families.	Group discusses FP theoretically. He knows specifics about some people's methods. Group members talk about FP advantages; see themselves as role models for their community work; discuss AIDS prevention.
Bawo (informal group who play this board game regularly)/men	Aged 28, married, has one child/eighth grade	Uses condoms and wife uses injectable/learned of FP at hospital; confirmed information from radio and drama group.	Observes others' family size (considers age of parents).	Whole group discusses pros/cons of having large families, FP method types, impact of economy.
Bawo/men	Aged 18, one girlfriend, no children/seventh grade	Practices withdrawal and sometimes uses condoms/ learned of FP from nurses in village and from radio.	Observes others' family size.	Whole group discusses FP problems, pros/cons of family size, method types.
Fishing group (working group who always fish together)/men	Aged 40, married, two children/second grade	Uses condoms/learned of FP from drama group.	—	Whole group discusses FP misconceptions, advantages.
Fishing group/ men	Aged 23, married, one child/seventh grade	Uses condoms and wife uses injectable/learned of FP from radio and from drama group.	Observes others' child spacing.	Nearly all members discuss FP pros/cons, AIDS danger and prevention.
Fishing group/ men	Unsure of age (30s), married, two children/ no schooling	Does not use/learned of FP from friends, from nurses who visited village, and from radio.	Sees others at FP clinic.	Whole group discusses FP advantages, women's covert use, AIDS prevention.
UDF political (group 1)/mixed ^a	About 40, married, two living children, three deceased, three grandchildren/sixth grade	Never used/learned of FP from drama group.	Observes younger members' child spacing and family size.	—
UDF political (group 1)/mixed ^a	Unsure of age (40s), married, eight children/ no schooling	Never used/learned of FP in meetings at hospital.	—	Some group members talk about FP advantages outside of group time (he says it is hard to know if they use a method).
Rural finance/ mixed	Unsure of age (40s), married, three children/ no schooling	Never used/learned of modern methods from radio and health workers at hospital.	Cannot tell because most in group are elderly	Group does not discuss FP, but all members discuss AIDS danger and prevention.
UDF political (group 2)/mixed ^a	Aged 32, married, two children/seventh grade	Uses traditional methods and condoms/learned of FP from radio; learned details at hospital.	Observes others' child spacing.	Whole group discusses FP theoretically; personal conversations among only a few men. Discuss FP advantages, family size, economic situation.
UDF political (group 2)/mixed ^a	Aged 28, married, one child/no schooling	Uses condoms/learned of FP from radio and from people who talked about it.	Cannot observe because group members are elderly.	Whole group discusses FP theoretically. Members talk about economic situation; encourage each other; discuss method types, danger of AIDS.
South Africa (group that travels to South Africa regularly for work)/men	Aged 22, married, one child/no schooling	Not using/learned of FP from radio and at bawo group.	Observes others' family size.	Members discuss FP within age groups, but others may overhear. Discuss family size theoretically (difficulties of leaving large family behind), but not personal method use.
South Africa/ men	Mid-20s, several girlfriends, one child/ third grade	Not using (sometimes uses condoms)/learned of FP from radio, from hospital workers, and from educated friends.	Observes others' family size.	Group does not discuss FP, but one friend in group has told him of personal use. They discussed method type; encourage each other.
South Africa/ men	Aged 21, has girlfriend, no children/no schooling	Not using/learned of FP from sister, but did not want to hear about it.	Observes others' family size.	Overheard others discussing pros/cons of family size.
Football (informal sports group)/men	Aged 22, has girlfriend, no children/no schooling	Not using/learned of FP from friend.	Observes others' family size.	All members participate in conversations about AIDS, but not about FP.
Football/ men	Aged 32, married, five children/no schooling	Not using/learned of FP from radio.	Thinks some use FP because they participated in reproductive health study last year.	Group does not discuss FP.
Fisheries/ mixed	Aged 42, married, eight children/third grade	Not using/learned of modern methods from radio.	Observes others' child spacing.	Group does not discuss FP, but sometimes some people talk about FP pros/cons on their own before meeting.
Fisheries/ mixed	Aged 35, married, four children/sixth grade	Not using/learned of FP from radio.	—	FP not discussed as part of meeting, but some women talk among themselves. No discussion recently, but in past he remembers one about pros/cons (disagreement), family size.

— = Not applicable.

^aSeparate UDF political groups were formed for each of the two villages where interviews were conducted.

References

- Bongaarts, John and Susan Cotts Watkins. 1996. "Social interactions and contemporary fertility transitions." *Population and Development Review* 22(4): 639–682.
- Boulay, M. and T.W. Valente. 1999. "The relationship of social affiliation and interpersonal discussion to family planning knowledge, attitudes and practice." *International Family Planning Perspectives* 25(3): 112–118, 138.
- Center for Social Research (CSR), Save the Children Federation USA, Malawi Ministry of Health and Population, and MEASURE Evaluation. 2004. *Avoiding Unwanted Pregnancy and Sexually Transmitted Infections: A Rural Malawi District Study*. Chapel Hill, NC: MEASURE Evaluation.
- Coale, Ansley J. and Susan Cotts Watkins. 1986. *The Decline of Fertility in Europe*. Princeton: Princeton University Press.
- Fenton, Kevin A., Anne M. Johnson, Sally McManus, and Bob Erens. 2001. "Measuring sexual behaviour: Methodological challenges in survey research." *Sexually Transmitted Infections* 77(2): 84–92.
- Freedman, Ronald. 1997. "Do family planning programs affect fertility preferences? A literature review." *Studies in Family Planning* 28(1): 1–13.
- Hammerslough, Charles R. 1991. "Women's groups and contraceptive use in rural Kenya." In *The Course of Fertility Transition in Sub-Saharan Africa*. Proceedings of the International Union for the Scientific Study of Population seminar, Harare, Zimbabwe, 19–22 November.
- Kohler, H.P., J.R. Behrman, and Susan Cotts Watkins. 1999. "The Structure of Social Networks and Fertility Decisions: Evidence from South Nyanza District, Kenya." *Max Planck Institute for Demographic Research Working Paper* No. 1999–005. Rostock, Germany: Max Planck Institute for Demographic Research.
- . 2001. "The density of social networks and fertility decisions: Evidence from South Nyanza District, Kenya." *Demography* 38(1): 43–58.
- Malawi Government. 1999. *Mangochi District Profile*. Limbe, Malawi: Montfort Press.
- Marshall, Alex. 1989. "Malawi campaigns for smaller families." *Populi* 16(3): 13–17.
- Miles, Matthew B. and Michael Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage Publications.
- National Statistical Office of Malawi (NSO). 2003. *Malawi: An Atlas of Social Statistics, 2002*. Limbe, Malawi: NSO.
- Nnko, Soori, J. Ties Boerma, Mark Urassa, George Mwaluko, and Basia Zaba. 2004. "Secretive females or swaggering males? An assessment of the quality of sexual partnership reporting in rural Tanzania." *Social Science & Medicine* 59(2): 299–310.
- Palmore, J.A. and Ronald Freedman. 1969. "Perceptions of contraceptive practices by others: Effects on acceptance." In *Family Planning in Taiwan*. Princeton: Princeton University Press.
- Paz Soldan, Valerie A. 2003. "Diffusion of contraceptive intentions and practices in social groups in rural Malawi." University of North Carolina at Chapel Hill, doctoral dissertation.
- Rogers, E.M. 1995. *Diffusion of Innovation*. New York: Free Press.
- Rutenberg, Naomi and Susan Cotts Watkins. 1997. "The buzz outside the clinics: Conversations and contraception in Nyanza Province, Kenya." *Studies in Family Planning* 28(4): 290–307.
- Valente, T., Susan Cotts Watkins, M.N. Jato, A. Van Der Straten, and L.P. Tsitsol. 1997. "Social network associations with contraceptive use among Cameroonian women in voluntary associations." *Social Science & Medicine* 45(5): 677–687.
- Watkins, Susan Cotts, Naomi Rutenberg, and Steven Green. 1995. "Diffusion and debate: Controversy about reproductive change in Nyanza Province, Kenya." Paper presented at the annual meeting of the Population Association of America, San Francisco, 6–8 April.
- Wheeler, David. 1985. "Female education, family planning, income, and population: A long-run econometric simulation model." In *The Effects of Family Planning Programs on Fertility in the Developing World*. Eds. Nancy Birdsall, Bryan L. Boulier, W. Parker Mauldin, Robert J. Lapham, and David Wheeler. *World Bank Staff Working Paper* No. 677. Washington, DC: World Bank.
- Zaba, B., J. Ties Boerma, E. Pisani, and N. Baptiste. 2002. "Estimation in Levels and Trends in Age at First Sex from Surveys Using Survival Analysis." *MEASURE Evaluation Working Paper* No. WP02 (51). University of North Carolina at Chapel Hill.

Acknowledgments

The author gratefully acknowledges support for this research from the MEASURE Evaluation Project, USAID, and the Andrew W. Mellon Foundation Research Residency Award. The author conducted this work while she was a predoctorate trainee at the Carolina Population Center of the University of North Carolina at Chapel Hill, funded through a NICHD–NRSA training grant and the Compton Foundation. She would like to thank her advisor, Amy O. Tsui, for her comments and advice in the preparation of this article and to acknowledge the feedback and comments from Will Dow, Carolyn Halpern, Allan Steckler, Trude Bennett, and Susan Cotts Watkins. Finally, she would like to thank Joseph DeGraft-Johnson for facilitating her fieldwork internship in Malawi and the fieldworkers in Malawi for their hard work on this project, with special thanks to Maines Gondwe Malenje, Paul Butao, and Lucius Chipendo.