Antiretroviral Medication Support Practices among Partners of Men Who Have Sex with Men: A Qualitative Study

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Abstract

The aim of this qualitative study is to describe the practical support for antiretroviral therapy (ART) adherence offered by partners of men with HIV. Twenty couples in which at least one partner was HIV positive and on ART were interviewed separately about their involvement in their partners' ART adherence. The interview elicited narratives of specific recent events around taking medication, as well as accounts of what the participants usually did to support their partners' adherence. Three members of the qualitative team coded and verified the interviews for adherence support practices. Partners offered a wide range of kinds of practical support. Reminding included (1) regular reminding that was habitually offered, (2) situational reminding adapted to changing circumstances, and (3) intensive reminding, either regular (i.e., nagging) or situational. Instrumental helping involved monitoring medication adherence, bringing or setting out medications at the dose time, organizing the pills, and requesting and/or picking up refills. Coaching involved situational problem-solving and shaping behavior by reinforcing incremental gains and offering affirmations. Findings demonstrate a range of support practices for ART adherence, often tailored to partners' styles or to the changing process of adherence. By examining narratives of support transactions as they occurred, the study discriminated among the different dimensions, forms, sources and contexts of social support. These distinctions, often neglected in social support research, have implications for HIV care and research.

Introduction

EXCELLENT ADHERENCE to antiretroviral medications (ART) is essential for the successful management of HIV disease. Health researchers have found social support is related to positive health outcomes across a broad range of disease contexts, for example diabetes¹ and heart disease.² Similarly, research into the correlates of adherence has consistently found an association between good adherence to ART and social support^{3–8} (see also Ammassari et al.⁹ for an overview). For example, Godin and coworkers,¹⁰ in a longitudinal study of 376 people with HIV, found perceived social support and not living alone among the determinants of adherence. Likewise, Malcolm et al.,¹¹ in a qualitative study of 44 men and women with HIV/AIDS, reported having "substantial" social support to be associated with adherence to ART.

While this positive association of health outcomes and social support is encouraging for researchers intending to develop interventions to improve adherence to ART, the

formulation of such interventions has proven challenging because of the complexity of the concept of social support. Social support has different dimensions (perceived and received), different forms (e.g., emotional, practical), different sources (e.g., partner, family, friends, support group), and different contexts (e.g., crises, chronic stressful situations, everyday life) all of which have been shown to be associated with different outcomes.

Perceived social support, that is, people's assessment of the availability of support when they might need it, is associated with positive outcomes. When the research focus has shifted to received support, that is, people's experience of being in need of support and receiving it, researchers have not found positive benefits to well-being.^{12,13} In fact, more often researchers have found that received or enacted support has had a negative association with well-being.^{14–18}

A further complexity in the social support picture emerges when support is examined in terms of the kinds of support that are perceived or received. Support has been variously

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conceived in terms of the nature of the support that is provided. Generally speaking, the taxonomies distinguish between emotional and practical support, with emotional support described as including empathy, expressions of concern and of affection, and practical support described as including physical assistance, material aid, and information provision. In a daily diary study examining the different effects of emotional and practical support on mood outcomes in 68 law school students and their significant others, Shrout et al.¹⁹ found that receiving emotional support was associated with an increase in angry mood states, but the receipt of practical support was not associated with worse mood.

DiMatteo,²⁰ in a meta-analysis of 122 quantitative studies of social support and patient adherence to various medical regimens, found that practical support correlated the highest with adherence. Vervoort et al.,²¹ in a review of 24 qualitative studies of adherence to ART, also found that practical support was the aspect of social support that had the strongest relation with adherence.

With respect to the sources of support, the relationship partner has been shown to be the primary source of social support,^{22,23} and this has held true for gay male couples coping with HIV.²⁴ There is evidence that spouses and partners provide more practical support than casual relationships,^{25,26} but there is an acknowledged lack of research on the specific forms of practical support that spouses and partners actually offer in support transactions.¹⁹ Work that has tried to discern more specific forms of support from partners has still yielded a heterogeneous mix of target behaviors that is not specific to particular disease contexts.^{27,28} This research has produced a general list of tactics that can be studied across disease contexts,^{29,30} but still leaves us with insufficient data on the direct provision of practical support for HIV-specific adherence. Also lacking are data on support that is ineffective, or that is not experienced as supportive, or that miscarries.

Furthermore, even with these useful refinements of the concept of social support, the actual mechanisms of support are not well understood.^{23,31} Researchers have called for more fine-grained analyses of what transpires in social support transactions.^{32,33} In HIV adherence literature specifically, researchers have called for qualitative studies of support transactions to clarify the processes of support for ART adherence.^{34,35}

The aim of this qualitative study is to describe the specific practices offered within 20 gay male couples to support their partners with HIV in maintaining adherence to their medication regimen. The analysis focuses on what partners do in day-to-day interactions in order to clarify what practical support for ART adherence entails. This descriptive work will help elucidate the specific mechanisms by which partners foster adherence to ART through practical support.

Methods

Sample and procedures

This study draws on data from the first phase of the Duo Project, a three-phase study of relationship dynamics and HIV medication adherence. In the first phase, from December 2006 to March 2007, 20 gay couples were recruited for one in-depth interview about their relationship and adherence issues.

To be eligible for the study, participants had to be English-speaking and 18 or older. In addition, the couples had to have been coresiding for a minimum of 3 months and at least one of the partners had to be HIV positive and on an acknowledged antiretroviral medication (ART) regimen for at least the past 30 days. Couples were recruited from local HIV care newsletters, referrals from other studies, HIV clinics, and gay venues. Interviewers obtained informed consent at the time of the first interview. The UCSF Institutional Review Board approved the study's consent procedures.

The two individuals in each couple were interviewed simultaneously but separately to avoid one person shaping his answers based on the other individual's account of the interview. Experienced interviewers trained by the qualitative team conducted the interviews in private rooms at the UCSF Center for AIDS Prevention Studies (CAPS). Participants were reimbursed \$40 each for the one interview. Interviews lasted approximately 90 minutes.

The focus for this analysis were the narratives concerning what practical support for adherence the participants offered their partners with HIV and the narratives recounting what support for adherence the participants with HIV reported receiving. If the participant's partner was HIV positive, he was asked the following questions concerning his partner's adherence practices and the participant's involvement in those practices:

- Can you tell me about your partner taking his medications this morning or the last time he took medication? (PROBE for a story) What time was it? Where were the medications? What triggered his memory that he needed to take the meds? Is this how it usually goes?
- Are there things you do to be helpful to your partner in taking his medications? (PROBE for a specific example if not offered. Keep asking "what else do you do?" until he can offer no further ways.)
- Tell me about the last time he missed his medication dose? Where was he, when was it, what was he doing? Where was he when you remembered and what did he do?
- READ: "So he missed this dose because {interviewer reiterate reason given above}, is this usually why he misses a dose, or are there other situations?"
- What was your reaction to his missed dose? (PROBE: keep asking about what participant did to remind partner Do you help him to remember to take a dose, can you give an example? What do you do or say? How does that work for him? For you?)

If the participant was HIV positive, he was asked the following questions about what practical help for adherence he received:

- Can you tell me about taking your medications this morning or the last time you took medication? (PROBE for a story.) What time was it? Where were the medications? What triggered your memory that you needed to take the meds? Is this how it usually goes?
- What does your partner do that is helpful to you in taking your medications?
- Does your partner do anything that is unhelpful?
- Tell me about the last time you missed your medication dose? (PROBE for a story.) Where were you, when was it,

what were you doing? Where were you when you remembered and what did you do?

- Read: "So you missed this dose because {interviewer reiterate reason given above}, is this usually why you miss a dose, or are there other situations?"
- Was your partner aware of the missed dose? What was his reaction?
- Does your partner know your medication regimen/schedule (i.e., what you take and when you take it)?
- When you have missed a dose? How does he know?
- If he has found that you have missed a dose, what does he do or say? How does that work for you?
- Has he helped you to remember to take a dose, can you give an example?

Participants in seroconcordant relationships were asked all of the above questions, since they could be both the adherence support giver and recipient. Participants in serodiscordant relationships were asked only the questions relevant to their own or their partners' serostatus. Narrative data were audio recorded then transcribed for analysis. Transcribed interviews were entered into ATLAS.ti, a software program for management and analysis of narrative data.

For participants who were on ART, we assessed adherence over the past 30 days using a visual analogue scale.³⁶ For each HIV medication prescribed, the participant was asked to indicate how much of each drug they had taken in the past 30 days by placing a line on a 20 cm scale marked from 0% to 100%. Adherence was then calculated as an average across all medications in a respondent's prescribed ART regimen.

Qualitative analysis

We used a team-based qualitative analytic approach to developing codes and coding the narrative responses to the questions of interest for this analysis.^{37,38} Team members began the analysis of the narrative data by focusing on participants' accounts of support that was offered or received. We read the narrative accounts repeatedly and, based on these close readings, developed codes that reflected what was said in the interviews. We used index codes to demarcate sections of text relevant to this analysis and marker codes to note the presence of specific actions, attitudes, feelings, and experiences.^{38,39}

The qualitative team developed the coding protocol using 5 couples' interviews (i.e., 10 interviews). After 10 interviews, no new codes emerged from the narratives and the codes were judged to be saturated. The completed codebook included the codes, definitions of each code, and an exemplar of each code from a narrative.

The remaining cases were coded by one team member and verified by the other two. Disagreements were resolved through discussion until consensus was reached. The data of interest for this study involved coded sections about ART adherence practices. These coded narrative sections were re-read several times and grouped according to similarity of adherence support practice (e.g., reminding). The resulting groups were then broken down into more refined sections (for example, situational reminding).

Results

Ten couples in the sample were seroconcordant and 10 were serodiscordant. The 30 participants with HIV were all taking ART and had been on antiretroviral medication for an average of almost 7 years. The sample was ethnically diverse and mirrors the gay male population with HIV in San Francisco. Many participants reported being on disability assistance, which accounts for the modest level of reported income. (See Table 1 for detailed demographics of the study sample.)

Current adherence as self-reported on the visual analog scale by participants with HIV was high (mean, 96.5; range, 50–100; standard deviation [SD] 9.25). Thus, this small sample of 30 was highly adherent without much variability in their reported adherence.

We found three kinds of practical support for adherence to ART described in the narratives of the couples in our study: reminding, instrumental helping, and coaching. There were no differences between the seroconcordant and serodiscordant partners with respect to offering practical support. These support practices were present without respect to the serostatus of the support provider. With respect to the accounts of practical support offered by both members of a couple, we found similarities in their accounts of kind of support, though they did not always provide narratives of the same incident. None of the couples offered contradictory accounts of support offered or support received.

TABLE 1. SAMPLE CHARACTERISTICS

Age—mean years (SD)	48.7 (9.0)
Race/Ethnicity—n (%)	
Black	6 (15.0)
White	28 (70.0)
Latino	4 (10.0)
Other	2 (5.0)
Education—n (%)	
<High school graduate	3 (7.5)
HS graduate	8 (20.0)
Technical training or 2 years of college	13 (32.5)
College graduate	10 (25.0)
Advanced degree (MA/MS/PhD/JD/MD)	6 (15.0)
Annual personal income—n (%)	
<\$10,000	9 (22.5)
\$10,000–\$19,999	15 (37.5)
\$20,000–\$39,999	5 (12.5)
\$40,000–\$59,999	5 (12.5)
\$60,000–\$79,999	2 (5.0)
\$80,000–\$99,999	2 (5.0)
\$100,000 or more	2 (5.0)
HIV-positive	30 (75.0)
+Self-Report Viral Load	24 (80.0)
Undetectable—n (%)	
Self-Report CD4 count—mean (SD)	464.7 (223.7)
Months on anti-retroviral medications—mean (SD)	83.8 (82.6)
Antiretroviral medication adherence—mean (SD)	96.5 (9.3)

n = 40 for all variables except viral load, CD4, months on meds and adherence scores (*n* = 30). Mean couple relationship length = 119.4 months (*SD* = 88.3; *Med* = 99). Mean couple length of time living together = 106.1 months (*SD* = 88.0; *Med* = 72).

SD, standard deviation.

Reminding

Reminding was the most common form of support offered, and it took three forms: regular reminding, situational reminding, and intensive reminding.

Regular reminding. Some participants offered reminders about medications on a daily basis. This form of enacted support was very routinized and, as described by the participants, was simply part of their ordinary life.

So, every night before we go to sleep, he's like, "Have you taken all your medicines?"

He asks me. Basically, that's what we do. Every day, "You taken your meds?" "Yeah."

Some days I might set it over by the stereo and N. will say, "Did you take your medicine?" Because he does remind me every day.

Sometimes regular reminding was a joint activity that the couple did for each other.

We ask each other, "Take your medicine today?" You know, remind each other, continuously.

Situational reminding. Some participants reminded on a situational basis, for example, when their partners started a new drug regimen.

When I told him I was getting some new pills, he would always ask me, "Well, did you take your medicine?" And so I'd say, "Yes," and you know, after he knew I was on the same meds for a while, he'd stop asking.

Or when the participant noticed that his partner had not taken his pills:

And he'll call me sometimes at work and say, "Did you, did you take your morning pills?" you know, "Because I still see 'em on the kitchen counter." And if he does, then I have a backup at work. So, I make sure and say, "Oh, I'm glad you told me, because I was rushing out," and you know, "I was running late," or whatever, and that's how he reminds me.

Other times, selective reminding was described as more of a judgment call, such as an assessment of how exhausted a partner might be.

Usually, if he falls asleep and misses a dose, half the time I'll wake him up for the dose. If he seems really, really, really tired I know he'll take it the minute he wakes up in the morning.

While in an ideal world, the partner would never fall asleep without taking his medications, or his partner would always wake him up and insist he take them, this narrative of real world experience reveals what the limits to practical support might be.

Intensive reminding. This included nagging, especially if the partner was not willingly adherent.

I aggravate him until he'll eventually tell me. 'Cause I'll say like, "Well, you take your meds, have you eaten? Have you taken meds?" And then finally he'll say, "You know what? I'm not takin' it." And I'm like, "What?" And then, "Okay, I'll take it, let me take it, you're not gonna leave me alone 'til I do."

His partner casts this "aggravating" as nagging:

No, I took it last night. He reminded me, kept reminding me, kept nagging me and nagging me about it, so I ended up taking them.

Another participant gave the following account of his partner's intensive reminding when he learned that the participant had missed his noon medications four days in a row.

He's so pissed. He goes, "Well," when he finds out, especially last week when I missed four days in a row, "God damn it." And he goes, "I'm going to have to just light up your cell phone. I don't care what you're doing, you know, whatever you're doing you're going to drop what you're doing and take your pills." He said, "I'm going to call you between ten and one everyday, just light up your phone until you tell me you take your pills." But ever since then I've been taking them so when he does call, "Yeah, I took them." So that's, that's it.

His partner's selective intensive reminding was a successful strategy, and the participant stopped missing his noon medications after that.

The term "nagging" bears a negative connotation. Research on social control in couples has shown that while people may change health behaviors in response to negative social control efforts like nagging, they will also experience negative affect such as irritation or anger.^{28,40} The participant quoted above whose partner "aggravated" him until he took his medication describes having a negative affective response when the interviewer asked him how he felt about his partner's intensive reminding:

That's fine. I'll just get annoyed with him nagging then take it just so he'll shut up. [Chuckles] It's like, "Okay, fine, I'll take it. Just shut up about it."

But feeling annoyed at being reminded was an unusual response in this sample. The following comment by a participant when asked his response to being intensively reminded was typical for our sample: "It shows that he cares, you know?"

Regular reminding resembled a habit, a routinized behavior that had been incorporated into the reminding participant's daily life. None of the participants who gave accounts of being reminded regularly described it as nagging, or recounted not liking being reminded. Selective and intensive reminding were not habitual, and involved making a judgment about whether, when and how to remind.

Instrumental helping

Participants described four kinds of instrumental helping for maintaining medication adherence: monitoring medications;

setting out medications; organizing medications for partner; ordering and getting medication refills.

Monitoring medications. Monitoring medications involved checking to see if the partner had taken his medication. This form of practical support could go unnoticed by the partner. For example, if the monitoring partner saw that the medication had been taken, no further action would be necessary. If the medication had not been taken, then the participant would either point out the fact (i.e., remind) or would bring the unconsumed dose to his partner.

Interviewer: How would you know if he missed a dose of his HIV medication?

Participant: He's got them in boxes by day and time of day, so—especially at bedtime, you know, I check the box before I go to bed.

Interviewer: Okay. And if you see that he hasn't—

Participant: I wake him up and bring him water and pills.

In one case, monitoring involved always witnessing the partner taking the medications.

Participant: He eats his cereal on the cutting board, which we pull out, which moves the table to him because he's on a chair with wheels because he can't walk very well. And it's right next to the refrigerator for milk. He eats cold cereal. The medication we have is kept on the cutting board. I put it there so that he will take it, but I have to see that he takes it and not—

Interviewer: Okay, so you actually watch him?

Participant: I have to see the empty bag because otherwise, he will start to take it and get distracted, possibly put it in a pocket. I have to—it's my responsibility to see that he takes it in a timely manner and that he's actually taken it.

This participant's adherence support practice had apparently evolved over time and adapted to his partner's changing physical circumstances. The change in this case involved a decline in cognitive functioning with respect to memory.

Bringing medications to partner or setting out medications. Some participants had a regular practice of bringing medications to their partners, or setting out medications at the time they needed to be taken.

And there's a pill that he has to take once a week, where he can't eat for half an hour after he takes it. And I got up before he did, and I got him the pill and brought him water to take it.

He gets them (meds) out for me when I make the meal. Like when I cook breakfast, lunch and dinner because I actually cook breakfast, lunch and dinner, and he gets the pills out. He knows what pills I'm supposed to take at what times. And he just has them sitting out for me.

Notice that the practice of bringing medications or setting out pills can involve discernment on the part of the caring partner. In the following narrative, the participant had observed how the medication affected his partner, i.e., that it

did not make him sleepy, so he judged that it was appropriate to take them with the meal while they are still up and interacting or watching television. In other cases, when medications made partners sleepy, it was deemed a better strategy to take them just before bedtime.

He can take his medication and not get drowsy after it, so I always put it on his tray when we bring it into the den to eat. We have like a little tray where we have our plate, and drinks and stuff, and napkin and all that. And I put his on the top, his medi-set, for that evening, so that's sort of his reminder, "You need to take your pills."

Organizing medications. Another instrumental practice around medications involved the participant organizing the pills into a Medi-set or other pill container on a daily or weekly basis.

He's the one that does my Medi-set. He does all the meds and everything, he takes care of them. And then my little thing that I carry with me to work, he fills it up every week so he just says, "Here, I filled our Medi-set, it's in your bag."

I store my medication in a kitchen drawer. Actually J. set up a kitchen drawer with a divider down the center. This is where his compulsion to control comes in, okay? It's a perfect divider with his on one side, mine on the other, and all of my medications are there.

Ordering and getting medication refills. Some participants were highly involved in calling in medication refills and/or picking up the refills at the pharmacy. Others were aware of their partners getting close to the time for a refill and pointed it out to them.

Interviewer: Do you guys talk about filling your prescriptions?

Participant: Yeah, he'll remind me. He'll say like every once in a while, "Are you getting low? You better call it in before you run out."

Coaching

In our sample, coaching involved situational problem-solving and shaping behavior by reinforcing incremental gains and offering affirmations. Coaching addressed a particular current adherence issue the partner faced. Like the other adherence support strategies, it was personalized to fit both with what needed to be achieved within the situation and voiced in a way the partner could hear. One approach involved coaching in order to help the partner manage side effects.

Interviewer: So are there things that you do to try to be helpful to your partner in taking his HIV meds?

Participant: I try to make him take it earlier. Because he takes 'em twice a day, so I tell him, "Soon as we get up in the morning, why don't you grab an apple or something, or juice or something, or some toast, or cheese toast or whatever, take your meds, and then take the other dose at like 1:00. Because you're giving it, you're giving your five hours in between. It says at least 4—4 to 5 hours—between doses. So, you've given that

4 to 5 hour window." From 7:00 to 11:00. Then if you take it at 1:00, by the time you're ready to go to bed, about 9:00 or 10:00, the side effects should wear off."

The side effects of ART have been identified as a significant barrier to adherence.^{3,5,34} The provision of practical support for the management of side effects could be key in some people's ability to continue an uninterrupted course of ART.

Another participant narrated an account of his partner coaching him to find a way to make taking medications a routine or habit.

Interviewer: Okay. And when you told him, "I may have missed it, can't really remember" what was his reaction?

Participant: You know that was before I got into this habit of doing it when I brush my teeth. He said, "Do something like this to help you remember." That was his suggestion.

Routinization of medication-taking is recognized as an important aspect of ART adherence.⁴¹

In another instance, a participant's partner had missed his medications several times one month and the nonadherence was reflected in the laboratory assay measuring his CD4 level and his viral load. The participant quoted below was medically trained and could interpret these results to his partner. When his partner stayed adherent the following month, his blood test reflected it, and the participant responded positively to the improvement as a way of reinforcing his partner's adherence.

'Cause I says son of a gun, this thing is working. I mean, you know, look at the labs. I mean, I'm seeing a whole thing here. And so I think that he saw in my excitement, took it more as excitement, and, and confirmation rather than a putdown of like, "You didn't take your meds." I wouldn't come at him like that, I wouldn't go to anybody like that. That's not the way you handle a situation.

Discussion

We analyzed narratives of support transactions for ART adherence and have shown that partner support for ART adherence as enacted in daily life can involve a range of practices. To address the complexity of the social support concept (i.e., dimension, form, source, and context), the analysis focused on the dimension of received support, in the form of practical support from a relationship partner in the context of everyday adherence to ART. Past research has shown that the dimension of received support is associated with negative outcomes in terms of well-being, but practical support is associated with positive outcomes in terms of health. In this study, particular instances of received practical support occurred in the form of reminding, instrumental helping, and coaching. Only when intensive reminding was viewed by the recipient as nagging did he describe an associated negative emotion (annoyance). Other occasions of intensive reminding were not described by the recipient as nagging. In fact, many recipients described the support as evidence of their partners' caring. This fine-grained examination of support transactions shows the importance of attending to all the aspects of social support. Understanding

how practical support is enacted in day-to-day life offers access to possible theoretical understanding of how and why support works when it is effective.

Social support researchers have wrestled with a contradiction that research in this area has produced, namely, perceived social support correlates with a range of positive physical and psychological outcomes, but received social support very often is associated with negative impacts on well-being.⁴² Some researchers have explored ways to resolve this contradiction.^{19,42,43} They suggest that being the recipient of social support in times of stress could lower self-esteem because it highlights the support recipient's inability to manage the situation without help.⁴⁴ Bolger et al.⁴³ propose that some effective support might be "invisible," that is, the support provider could describe the actual support given, but the support recipient would not have perceived it. In our study, monitoring the taking of medication has an invisible component in that if the medication had been taken, the supportive partner did not need to point it out to the partner. Coaching also had an invisible aspect to it in that it came in the form of suggestions, conversational exchange, and/or congratulations. Also, regular reminding had become an ingrained habit and as with most habits, was not particularly noticed. Furthermore, it is possible that received support might have different effects in the differing contexts of a stressful life event and everyday life.

The goal of most of the practical support described by participants in our study was for ongoing adherence. One of the challenges of ART adherence is the requirement always to maintain high levels of adherence. There are many factors that can affect even an adherent person's ability to maintain adherence. Practical support possibly functions to compensate the care recipient for factors that would otherwise negatively affect adherence, like mood shifts, life events, forgetfulness, and so on.³⁴

There are several limitations to the study. The sample is small and relatively homogenous in terms of the length of time the participants with HIV had been on medication. They also reported high ART adherence so that we do not have data on support provision in the context of poor adherence. More could be learned from a close look at how adherence support unfolds in people just starting ART and in people with poor adherence. Although we gathered narratives on actual daily adherence practices, the participants were interviewed only once. Since adherence is an evolving process, it would be important to examine adherence support practices longitudinally.

Conclusion

ART adherence is a process that unfolds and changes over time. People's lives have ups and downs independent of their HIV that can help or hinder adherence. The disease process has its own trajectory that can present challenges, too. Further, as improved medications become available, prescribed drug regimens are changed and require adaptation. That practical support correlates more highly with adherence than other kinds of social support^{20,21} is of particular relevance to this study in which we examined actual ART adherence support practices in 20 couples. We found that support practices for ART adherence are not acts that can be defined simply or offered in cookbook style as tactics to support adherence. Reminding, for example, ranged

from a routinized ongoing habitual interaction to a time-limited carefully targeted action. Next steps for research in this area involve examining this more nuanced concept of practical support in larger populations of people with HIV and at different points in their use of antiretroviral medications with varying levels of adherence in order to refine further a theory of adherence support, and in order to develop useful interventions for seroconcordant and serodiscordant couples in stable relationships. Specifically, there is a need to investigate how different types of practical support relate to adherence and clinical outcomes over time. Furthermore, more information about how partner support practices vary with relationship factors such as relationship satisfaction, stability, intimacy, communication, and conflict will be important in the development of effective interventions to foster adherence through partner support.

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