The Forms and Functions of Peer Social Support for People Living with HIV

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Abstract

Peers may be important sources of coping assistance, but their impact can be better understood if we examine their influence across various contexts. Although social support studies focused on people living with HIV have examined peer support in various contexts, they do not comprehensively account for situations in which peer support might be provided. The specific aims of this study are to (a) describe the various forms and functions of peer support for people living with HIV and (b) validate the Dennis (2003) concept analysis of peer support within health contexts. Results indicate that peer support is a potentially important adjunct to clinical care for enhancing coping skills, thereby improving the psychosocial functioning of people living with HIV. It is important to (a) assess patient access to peer support, (b) provide opportunities for peer support in the clinical setting, and (c) enhance disclosure and support-seeking skills to facilitate this benefit.

Keywords

peers; peer support; social support

Researchers have demonstrated a growing interest in how peers help others manage health and illness. Peers can be defined in broad demographic groups (e.g., women, men, adolescents), by their behaviors (e.g., individuals in substance abuse treatment), or as part of an illness community (e.g., people living with cancer, HIV, or mental illness). Dennis (2003)

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provided a concept analysis for peer support within a health care context that highlighted its complexity and significance:

> Peer support, within the health care context, is the provision of emotional, appraisal, and informational assistance by a created social network member who possesses experiential knowledge of a specific behavior or stressor and similar characteristics as the target population, to address a health-related issue of a potentially or actually stressed focal person. (p. 329)

Peers in created social networks include self-help groups or one-on-one support (e.g., buddy systems). Based on that conceptualization, peer support is a subcategory of social support more generally, differentiated specifically by the source of support (Goldsmith, 2004).

Dennis and colleagues (2009) conceptualized peer support as distinct both from natural lay helpers (e.g., a spouse or partner, other family members) and from professionals and paraprofessionals. Researchers have used her conceptualization (Dennis, 2003) to describe how peer support functions to help people manage postnatal depression (Dennis et al., 2009), breastfeeding (MacArthur et al., 2009), diabetes (Heisler, 2010), and kidney disease (Hughes, Wood, & Smith, 2009), among others. These studies have demonstrated that peers can be an important adjunct to standard care; they can provide information and advice to complement or supplement what people receive from health care sources (Hoey, Ieropoli, White, & Jefford, 2008). Peers specifically can provide experiential information. They can, for example, describe side effects of treatments or symptoms of the illness, and suggest strategies for managing those effects.

One domain in which social support has been studied extensively is for people living with HIV (PLWH). Goldsmith, Brashers, Kosenko, and O'Keefe (2007) have provided a review of qualitative research in this domain. Peer support, in particular, has been shown to be an important resource for PLWH in various cultures. In Thailand, support groups for women have emerged as an important resource (Liamputtong, Haritavorn, & Kiatying-Angsulee, 2009). Researchers in France have shown that a peer support intervention can have a positive influence on emotional and medical outcomes for adolescents (Funck-Brentano et al., 2005). In places where peer support programs have not been implemented, studies have shown there is an interest. For example, in Zambia, adolescents indicated an interest in a peer group program, regardless of whether or not they had disclosed their HIV infection status to others (Menon, Glazebrook, Campain, & Ngoma, 2007). Even in cultures such as China, where people do not tend to discuss emotions openly, there has been some success with peer counseling for particular clients (Molassiotis et al., 2002). Given the success and interest in peer support programs for PLWH, it is important to gain a greater understanding of the different forms and functions of peer support.

Studies have examined peer support in various contexts, such as support groups; however, they do not comprehensively account for situations in which peer support might be provided. To understand the possible advantages of peer social support and to develop effective support-building interventions, it is important to empirically validate Dennis's (2003) conceptualization within the context of PLWH. We define peers for the purpose of this paper as those who share the same illness condition but are not necessarily matched on other demographic characteristics. Peers have long been held to be potentially important sources of coping assistance, but their effects can be understood better if we systematically examine their influence across various contexts. Our specific aim, therefore, is to describe and compare the various ways in which peer support is provided to PLWH. We begin by addressing the following research question: *In what contexts is peer social support available for PLWH?*

In addition to identifying specific circumstances in which peer support is enacted, it is also important to discern how it functions for PLWH. We recognize that social support is a multi-faceted concept that includes the ways in which individual well-being and coping are enhanced by involvement in social networks, the perceived availability of help and acceptance by others, and/or the exchange of tangible and symbolic support in interactions between people (Albrecht & Goldsmith, 2003). This includes how people help others manage information (informational support), deal with their emotions (emotional support), or appraise potentially threatening situations (appraisal support; Dennis, 2003). We therefore address a second research question that asks: *How does peer social support function for PLWH?*

Finally, we address a research question about differences among the forms of support, and how participants react to those: *Do PLWH have preferences for different forms of peer support?* To more completely understand how peer support might be used to improve care for PLWH, we conducted the study described in the following section.

Method

As part of a larger study on social support for PLWH, we employed a mixed-methods approach to explore the range of peer social support experiences of people living with the disease. In addition, this data was used to examine the fit of Dennis's (2003) peer support concept within the context of PLWH.

Procedures

Following approval by the institutional review board for the protection of human subjects at both The Ohio State University and the University of Illinois at Urbana-Champaign, 81 PLWH who had some experience with peer social support were recruited through three locations: (a) an AIDS service organization in a medium-sized Midwestern city, (b) an AIDS service organization in a large Midwestern city, and (c) an AIDS clinical trials unit (ACTU) in a different large Midwestern city. Participant recruitment entailed passive solicitation via fliers posted in the common areas of these facilities. Participants interested in the study contacted the primary investigator, who then scheduled them for an interview at the participants' respective health care facilities, the primary investigator's research office, or at the participants' homes, based on participants' convenience and availability. Participants completed an informed consent form and a brief survey before the interview, which included questions regarding participants' social support and peer support experiences. Three of the authors and one other researcher, each of whom received graduate training on qualitative methods and was experienced in interview techniques, conducted the one-on-one interviews. Probing and follow-up questions were included, when appropriate, to clarify issues and validate the interviewer's interpretations of responses. Given the sensitive nature of HIV and the issues discussed, each interviewer was trained to employ the immediate processing techniques of emotion acknowledgement, legitimization, and elaboration (Burleson & Goldsmith, 1998) before redirecting any upset participants to a trained counselor at the respective service center, although no participant required such assistance. Participants received $25 for their time.

Instruments

Demographic questionnaire—Respondents were asked demographic questions regarding age, sex, racial group, sexual orientation, and employment status. Health-related information (i.e., time since diagnosed with HIV, whether they were on medication for HIV or for depression, and current CD4 count and viral load) provided a health profile for each participant.

Interview schedule—A semi-structured interview schedule was generated to address the research questions. The first section was designed to elicit information about the challenges the participant had experienced as a PLWH. The remainder of the interview focused on what involvement participants had with peers through a variety of mechanisms, helpful and unhelpful aspects of peer support, how peer support influenced uncertainty and treatment decisions, and how peer support compared to other support experiences. Only data relevant to the current study are described here.

Participants

Of the 81 participants, 69 (85%) were men and 12 (15%) were women. The average age was 40 years (SD = 8.5, range 24–65). Fifty-six (69%) of the participants were gay, one (1%) was a lesbian, 16 (20%) were heterosexual, and eight (10%) were bisexual. Twenty-nine (36%) reported being employed, four (5%) were students, and 49 (61%) were on disability. Twenty-nine (36%) participants reported having a partner with whom they were in a committed relationship.

The average time since diagnosis with HIV was 8 years (SD = 4.5; range = 1–20 years). Thirty-seven (46%) of the participants reported having been diagnosed with AIDS. Those with AIDS reported that the average time since diagnosis was 4.9 years (SD = 2.7; range = 1–10 yrs). The mean CD4+ T cell count was 378 cells/mm^3 (SD = 263.1, range = 3 to 1500, n = 77). Because the range of viral loads was so large (50 to 500,000 copies/mL), the median of 400 copies/mL was a more accurate representation of the sample than the average of 26,614 copies/mL Sixty-eight (84%) participants were taking medication to treat HIV, and 25 (31%) were taking medication for depression. Only seven (9%) were not on any type of medication.

Data analysis

Before analysis, members of the research team compared each interview's text against the audiotapes to ensure accuracy. Once verified, the authors coded the transcripts using latent content analytic techniques (Lincoln & Guba, 1985; Corbin & Strauss, 2008). Specifically, two of the authors independently coded the interviews for specific themes and important issues related to the three research questions by using a modified open-coding approach (Strauss & Corbin, 1990). This involved thematically organizing content in participants' responses into a preliminary categorical scheme, to which tentative labels were applied. The two authors then met to compare and compile their findings, identifying similarities and reconciling differences in their respective categorical schemes. Through consensus, the authors constructed a detailed categorical system for the ways in which participants experienced peer social support. The authors then shared the preliminary categorical system with the remaining authors, who returned to the data to assess the exhaustiveness of the categorical system and to ensure that it properly captured all participant responses.

After reaching consensus on the reliability of the coding scheme, quotations that were deemed particularly representative of the categories were selected from the transcripts and agreed upon by the authors. The data analysis was then written and tied to relevant literature to explain the findings. Content validity of categories and themes were assessed through procedures described by Lincoln and Guba (1985): Participants in the later interviews were used to validate categories and themes from earlier interviews and a fellow HIV researcher reviewed transcripts to match categories and themes. All patient/personal identifiers have been removed or disguised so the patient/person described cannot be identified through the details of the story. Through this process, the authors codified an inventory describing (a) the contexts in which HIV peer support is exchanged, (b) the functions of HIV peer support exchanged, and (c) preferences regarding the receipt of HIV peer social support. Lastly, the

categorical system was used by two of the authors to count the frequencies with which participants reported exchanging (providing, receiving, or both) peer support in specific contexts, which yielded 100% inter-coder agreement.

Results

Participants reported that they received and provided peer social support in both created and embedded social networks. Of the 81 participants, 73 (91%) had friends or family members who also were infected with HIV, 45 (56%) received services or volunteered in an AIDS service organization (ASO), 24 (30%) attended a support group, and 10 (12%) participated in a one-on-one peer support or buddy program. The following sections describe more about these contexts of peer social support.

Created Social Networks

Participants described interacting with peers in created social networks, which included ASOs, support groups, and buddy/one-on-one peer support programs. These environments provided a variety of formats in which to seek, provide, and receive peer social support.

AIDS service organizations—Participants described involvement in ASOs, which brought them into contact with other PLWH. Based on the interview data, of the 43 (56%) who participated in ASOs, 12 (15%) said they both volunteered and received services, 9 (11%) volunteered, and 22 (27%) received services. Although participation in these organizations may not have been intended to provide peer support, it opened opportunities for interaction between PLWH. One participant noted, "At the Task Force, there are other people there with HIV, and people who are interested in it. That is support, but not a formalized type of thing." Another participant described occasions for more or less intentional interactions with peers through the ASO:

> A lot of times, like when we are waiting for our counselor or whatever, a lot of us will start talking about things. Also, they do social activities, like we went to the IMAX Theater. And they started a new group where they try to do social things off the property, like have a party at a bar or have a picnic, or things like this where we can even bring our friends and family and interact. It's very supportive, because you get to know different people, compare stories, and just be able to check up on one another.

Involvement in ASOs through volunteering or receiving services, therefore, provided opportunities for interaction and peer support for individuals in this study.

Support groups—Another context in which peer support is intentionally created is the support group. Participants described support groups in a variety of forms; some had no facilitator, whereas others were led by a health care professional or a trained peer or paraprofessional facilitator. One participant described his participation in two support groups:

> Right now I am currently in two [support groups], one is an HIV-positive group and the other we call an open discussion group. I've met and talked with a lot of people who are HIV positive. Basically, they are set up in a very informal atmosphere. We go around and check in and if anybody has anything important to talk about then they either take their time and talk about it then or we just do a quick check in and come back and let them discuss whatever is important to them at that time.

Support groups that meet online are increasingly being used (Peterson, 2009). One participant reported that he lived in a small community and in a "self-imposed exile." He noted that most support groups in his community were primarily gay (and he is straight), so that a chat room provided support from peers to whom he could more closely relate:

> It's a bunch of nice people in there. Once in awhile we talk about the medication we're taking, who's been positive how long, how they have dealt with it, what has been the worst part, and just chat with other people. A lot of the people in there have actually been meeting each other. The only problem there is that it's located on the West Coast so that's kind of bad for us Midwest and East Coast people. They have organized cruises they take every year. I was considering maybe doing that just to mingle. They have parties and things, HIV events. There again, that's on the West Coast, so it's a problem. It's a little out of my reach as far as that goes. You just sit down and chat and a lot of time it just is normal chat. It's been fun, but my biggest thing for the most part in that is just, "how are you today?" and then someone takes it into private chat. Someone new comes in–that's when we have new conversation. Other than that it's just general chat room stuff, which isn't too beneficial. Teasing each other about having Sustiva nightmares. Of course, I'm actually going to meet a couple of people from it so, hopefully that works out.

Although the online group allowed him to connect to people who he perceived to be similar to him, this participant did wish for the face-to-face contact that some (but not all) members of the group were able to experience.

Buddy program/one-on-one peer support—Although this was the least frequently described form of peer support for our participants, some health care organizations, ASOs, and research studies provided opportunities for formal one-on-one peer support or buddy programs. One participant noted,

> Yes, they [an ASO] have a buddy system and my friend David just left. He moved to Dallas, so I have to find another buddy. But we do everything together, we go out together, we go out to eat, go to the movies, go to each other's houses, work on the Internet, and different things like that.

Another participant explained the various tasks associated with his support provider role in a one-on-one peer support program, as noted in this example:

> Typically one of the research nurses would call and let me know that a patient was coming in that was newly diagnosed and wanted to talk with someone. I would come here and spend an hour, even more talking with that person, more listening to them than talking. Listen to their fears and in many ways relive my own experience, which at times is kind of hard. Offering support to the person who was newly diagnosed by letting them know that all of the feelings that they were going through were completely understandable, were normal, were typical, and believe it or not they were going to pass and they would move on to other things. Basically I would like to think that I served as an example to folks who were newly diagnosed in terms of how one can live and manage the disease in a healthy way.

Providing support to others has been shown to be therapeutic in other contexts (Berg & Upchurch, 2007; McCorkle, Rogers, Dunn, Lyass, & Wan, 2008), so that being a "buddy" can lead to mutually supportive interactions. In the context of HIV, buddies assigned to provide those newly diagnosed with support have also been found to experience social acceptance as well as personal growth and empowerment (Marino, Simoni, & Silverstein, 2007). A buddy or trained one-on-one peer support provider can act as a paraprofessional.

Embedded Social Networks

Participants also reported being in social networks in which there were members who were infected with HIV (e.g., gay men who had other gay male friends who were infected). Embedded social networks are those that occur naturally, including spouse/partner relationships, and other friends and family members.

Spouse or partners—Some participants reported that they were in a committed relationship with an individual who also was infected with HIV. For one couple, having HIV and having opportunities for mutual support provided a bond that kept them together, as described in this example:

> My partner and I—this is the first real relationship that I have been in with another male. I was about to call it quits with him when we found out about the HIV part. For me, that was 7 years ago today. With that coming on, we decided to stay on and at that time we thought we had 2 years to live at the most. There wouldn't be anyone else to put up with us, so we decided to stick it out. For the most part we are both fairly healthy. I don't think either one of us ended up with the ideal mate but we kind of hang in there together. He is probably more satisfied than I am, but as far as long-term partners go, I don't think we hit the right one. We will make it through—we love each other and that's all that matters.

> I: Do you feel that HIV is what kept you together?

> R: Yes, he's been diagnosed with full-blown AIDS, so we just hang in there and take care of each other. We have grown to love one another and there isn't any thing we wouldn't do for each other.

Another participant explained that his partner and a few close friends provided his primary sources of peer support:

> I don't really ever go to any support groups or anything like that. Talked with a few close friends, some that were HIV positive and some that weren't. And my significant other was diagnosed about the same time, so we at least had that, you know, each other to talk to about it.

Being in a relationship with someone living with HIV provided participants with a unique opportunity to receive and provide peer support in a day-to-day living environment.

Friends and family members who have HIV infection—Participants also described other members of their embedded networks who were support providers. Friend networks provide opportunities for peer support when others share the disease. Participants noted that information exchange with friends could happen concurrently with casual social interaction; therefore, they were able to integrate social and supportive functions. One participant noted,

> My previous roommate, he's HIV positive. and I have a couple of friends who are HIV positive, so we always sit around and talk about what kind of medications we're taking; what we're doing to keep ourselves healthy; what type of foods we eat; what we should do and what we shouldn't do.

Another participant described emotional support that occurred among members of his network, as shown here:

> Some of them [social network peers] provide me with a very positive outlook. The support they give me, the hugs, the handshakes, those types of things. When you go through that mental, emotional crisis, I have some peers that come through for me. I can't find the words for it. They come through and pull me out of that rut that I find myself in…. They pull me through and, vice versa, I do the same.

Participants also described providing support to others, such as:

> I try to get them to understand that we have it, it's here and we have to face it. I try not to look at what it can do; I look [at] what I can do to overcome that. I try to share that. Some participants discussed relying heavily on friends who had HIV infection as peers.

One participant noted, "I wouldn't say I have any close friends who aren't HIV." Several participants also described family members (e.g., a brother or sister) who were infected and for whom they provided support. These occasions were much less frequent than examples of friends with whom participants in our study shared supportive interactions.

Functions of Peer Support

As is evident in the previous examples, peer support ranges across the various functions that Dennis (2003) described (i.e., informational, emotional, and appraisal). Additional forms of support that have been defined elsewhere were also present, including instrumental or tangible support, esteem support, and network support. Tangible support, or the provision of goods and services, was evident in examples such as:

> So we go from step to step, all the way down to where I go clean somebody's floor and I'll get on my knees and I'll mop. Things I wish people would have did but, even washing dishes.

This participant discussed providing tangible support for others, and noted that tangible support was something she wished she had more often.

Informational support, which includes offering information or advice, was present in several examples. Topics ranged from doctors and clinic services, to diet and nutrition and alternative practices. One person commented:

> Sure, we talk about different medications, about alternative therapies I've used and recommendations for treatments beyond my medications, more holistic types of things, acupuncture and other things. I have listened to peers in that way and the medications they are on and the side effects they have experienced.

Because peers are the only people who can share information about treatment experiences, this is an important function of peer support.

Descriptions in the data often included multiple functions of support in one interaction, as demonstrated in this experience:

> With my friends (with HIV), they understand the disease and that I get tired very quickly. When we do activities, they kind of watch for when I'm starting to show fatigue and they either say, "Well let's sit down and rest," or they'll say, "Well, why don't we call it off, the rest of the thing off, and do something else later?" That helps a lot too, to have people that understand it and don't condemn you for it or anything. They understand and try to help you live as normal a life as you can.

This example reflects network support by allowing socializing and bonding, instrumental support through monitoring the participant's well-being, and esteem support by providing an atmosphere of acceptance and self-worth.

Preferences for Forms of Peer Support

People also talked about how forms of peer social support functioned differently for them, but the responses were not consistent. For example, when asked to compare one-on-one versus group support situations, several participants expressed preferences for one or the

other. Some participants preferred support groups to one-on-one peer support. One participant commented on the relative anonymity of group interaction, "Well, sometimes in a larger group, you're willing to do more. I'm willing to do more risk taking in some areas because these are not people that know me well, we've just come together for this reason." Another participant noted that groups offered more resources (e.g., a broader range of information and advice):

> I've talked one-on-one and in a support group but I mean, in a support group you get a lot more feedback from other people "Oh well I've been through that" or "this is what I did" versus one-on-one the person says, well you know, either "I understand" or "I don't." So I think with the support group, there's a lot more feedback and a lot more people throwing stuff out there than just one other person's opinion – but both are valuable.

Participants noted that support groups provided a basis for meeting people who they might not have otherwise met (e.g., from different racial or ethnic backgrounds, from different socioeconomic conditions, from different sexual orientations). One participant described his experience:

> It is kind of interesting – the group – there's a large variety of people that go there. We have one guy who actually works for the university here, and we have another guy that is married and is now going through this nasty divorce because he was HIV positive. Then we have a woman that comes to the group, and she was bringing this guy that she was dating that he found out that he was HIV positive just recently, but then he all of sudden stopped coming. And then we have another guy that is very financially wealthy to the point where he basically financially supports himself, only he doesn't work or anything and he is kind of an interesting person, twist to the group. And then we also have a another guy that is kind of pretty ill at this point so he doesn't come on a regular basis because of his health and strength and then we have another guy that is Black like myself that comes every now and then and he is not that much into the group though, just shows up every now and then randomly.

Others argued that one-on-one support had advantages, as noted in the following examples. This included more focused attention (in buddy or one-on-one programs), and familiarity with the support provider (in embedded networks). One participant noted this advantage:

> Well one-on-one versus a big group. You can get a lot more individual attention and focus on the one person. That voice can have a lot more control. It is always amazing how people will open up more in a one-on-one. They disclose more.

Another participant noted that he was more comfortable in a one-on-one situation with a friend:

> The one [friend] I do talk with I've known for a long time, he is HIV-positive, and he knows my ex who gave me this. So he and I talk a lot. I feel more comfortable with him than I would in a support group. Now if there were people in a support group that I did know then I would feel differently.

Participants, therefore, noted preferences for either the relative anonymity of support groups or the closeness of friends, and for group or individual support delivery.

Discussion

Data from this study revealed that PLWH can access peer support in a variety of contexts, which can vary in nature of the relationship (i.e., embedded vs. created), level of formality (e.g., the presence or absence of facilitators in support groups), social and physical distance

between the participants, and number of participants (e.g., individual vs. group). These various forms of peer social support allowed people to exchange network, tangible, informational, emotional, appraisal, and esteem support.

This study also provided an opportunity to examine the fit of Dennis's (2003) conceptualization of peer social support in health care contexts. Her paper is a valuable starting point for understanding the nature of peer social support and social relations – she has organized the concept of peer support into a clear and heuristic system. Data from our study, however, revealed several points that need clarification or elaboration to understand peer support for PLWH.

One important distinction between our analysis and Dennis's (2003) analysis is that she defined peer support as occurring only in created social networks. Our participants noted that peer support could also be provided in embedded social networks that included family members, friends, and partners. Haas (2002), for example, studied couples who were either HIV discordant or HIV concordant (i.e., couples in which only one partner was infected and couples in which both partners were infected, respectively). In the latter case, a partner who was also an HIV-infected peer could provide support. Haas (2002) found that relational partners, in fact, were the most common source of support for the gay male couples dealing with HIV in his study. As in our data, he found that social support behaviors enhanced relationship maintenance for couples in which both partners were living with HIV. Additional research has indicated that support from members of embedded social networks may have different impacts on physical and mental health than more general sources (Reich, Lounsbury, Zaid-Muhammad, & Rapkin, 2010). These findings in conjunction with the results of our study indicate that an expansion of the sources of peer support beyond created social networks is warranted.

One reason that Dennis (2003) considered peer support to be a created network phenomenon is that she used peer support and peer intervention interchangeably, but that seems to cloud rather than clarify some contexts in which peers might engage in socially supportive behaviors. Participants described casual – even social – events as providing peer support, in both created and embedded networks. And, although Dennis (2003) recognized lay helpers as a category similar to peer social support, she argued that they were not providing peer support because what they did was so much part of their daily lives and because they were not part of a created social network. We believe these were faulty assumptions because of the similarity in functions that our participants described between peers in either type of social network.

Second, Dennis (2003) argued that peer support served emotional, informational, and appraisal functions, and "primarily occurs without the provision of instrumental support" (p. 325). It appears likely, however, that the availability of tangible assistance may depend on the underlying relationship. For example, a peer who is a close friend, partner, or family member may be both able and willing to provide instrumental support; on the other hand, peers in formal settings or who are physically distant (e.g., connecting through Internet chats) may be less inclined or able to provide tangible assistance. The exception to the latter might be peers in formal buddy programs, in which the purpose specifically is to provide instrumental support. Participants in our study noted various ways in which both embedded and created peers provided instrumental support (e.g., helping a buddy move, delivering meals, providing financial assistance).

The distinction between embedded and created networks also failed to capture the potential for evolution of relationships over time; one may start out as a buddy in a formal program or a fellow volunteer in an ASO, but the kinds of conversations participants have and the kinds

of support provided might well result in a relationship that comes to be labeled as "friend." In one example above, an assigned buddy ended up being called "friend David" and another suggested that an Internet chat group lead to face-to-face meetings that suggested relational evolution. The social events organized by the ASO in another example also called into question whether some people started to be "friends" as they engaged in social activities in addition to peer support. Perhaps the HIV context is especially relevant here to the extent that PLWH sometimes experience considerable stigma and upheaval in their social networks. Peers may take on special significance when others do not understand or cease to be available and peers who are, at one point, part of one's formal network may well become part of a new embedded network that arises from self-advocacy, involvement in ASOs, and so on.

A final area in which we believe that clarification is needed in Dennis's (2003) conceptual analysis is based on her claim that we do not know much about how emotional support might work. Based on her literature review, Dennis (2003) argued that we know little about how emotional support works, yet communication scholars have explored this question in what has become a large body of research with compelling evidence. For example, Burleson and Goldsmith (1998) suggested that emotional support reduced distress and enhanced coping to the extent that it encouraged an individual to verbalize the cognitive appraisals that produced negative emotions. Emotional support is most likely to be effective in a conversational environment in which it is safe to discuss emotions so that a distressed person's thoughts and feelings can be examined and, when appropriate, altered. In this model, similar others are uniquely situated to express empathy, convey understanding and acceptance, and offer alternative emotional appraisals and responses. Although much research has examined peers as sources of experiential information, our data, and previous theories of how emotional support is communicated, show that peers clearly can also be emotionally supportive.

These differences between sources and functions of peer support in our data, compared to Dennis' (2003) concept analysis, also point to a broader issue regarding methods of concept development. Basing defining attributes of a concept on those that occur most frequently in the published literature may leave out important types of cases (Paley, 1996) and may overlook contextual factors that are significant for practical application (Morse, 1995). The likelihood that one's embedded network includes partners and friends who have HIV infection is a significant feature of HIV as a type of peer-support context. Further, our participants felt embedded network peer supporters had distinctive advantages and this is relevant for those who might wish to design peer interventions in this population. Testing Dennis' (2003) conceptual model with qualitative data enabled us to engage in what Morse (1995) called "concept correction."

Finally, we believe it is important generally to understand the effectiveness of various peer support strategies (Brashers, Neidig, & Goldsmith, 2004). In a meta-analysis of HIV treatment adherence interventions, the only study that reported negative intervention effects on viral load was a study that used peer educators instead of health professionals (de Bruin et al., 2010). While that is certainly not an indictment of all peer support efforts, it did point to the need to explain what makes peer support strategies more or less effective. The mere existence of peers does not guarantee they will be helpful. Likewise, to the extent that formal peer interventions include training, it is useful to have evidence-based recommendations. The quality of peer relationships and interactions are essential to positive effects (Goldsmith & Brashers, 2008).

Limitations and Future Research

Although these findings provide further information about peer support, there are several opportunities to improve and develop future research. While the sample for this study was fairly large, it was from several cities and several different organizations and programs. This diverse set of peer support experiences provided some information, but more might be gained from focusing on a particular form of peer support in greater detail. Further explorations of the specific functions of different types of peer support could contribute greatly to facilitating the most beneficial experiences for PLWH.

Because this study was focused on exploring the forms and functions of peer support, little attention was given to the potential challenges or dilemmas of peer support. Participants in peer programs must face the challenge of disclosing their status as well as potentially intimate health issues that might deter some people from participating. Participation in peer support programs for people living with an illness may be detrimental if peers are very sick or die, or if the peers are in much better health. Future research should explore these dilemmas and the potential challenges of peer support.

Implications

Providing access to peer support can facilitate the development of several coping skills. As functions of peer support found in this study, informational and esteem support can lead to increased education about HIV as well as increased assertiveness, which are important elements of self-advocacy (Brashers, Haas, & Neidig, 1999). In addition, through informational and appraisal support, peer support has the potential to impact decision-making such as decisions about medical tests (Gattellari et al., 2005), as well as decisions about sexual practices (Carlos et al., 2010). Similar to the impact peer support can have on decision-making, it can also have an impact on adherence (Simoni et al., 2009). Some research has indicated that different support networks, such as the formal and informal networks found in this study, have different impacts on adherence (Hamilton, Razzano, & Martin, 2007), reinforcing the need to expand the conceptualization to include a larger spectrum of support networks. Peer support can also facilitate uncertainty management, which is an important coping skill for PLWH (Brashers et al., 2004). Because these coping skills are driven or bolstered by peer support, providing opportunities for peer support is important.

Interventions can enhance opportunities for peer social support through created networks of one-on-one or support group interactions, or from skills training (e.g., self-disclosure, support seeking) that might help individuals take advantage of embedded networks. Some participants stated a preference for support groups because groups provided more resources (e.g., information from a variety of individuals) or relative anonymity. Others felt more comfortable discussing HIV with close friends. Clinicians can assess patient preferences, and provide information and resources to help patients access and use peer support.

Buddy programs or formal one-to-one peer support are still relatively rare outside of clinical trial/intervention studies. Similar to our study, an analysis of federally-funded services in Los Angeles, Orange County, San Francisco, the District of Columbia, Michigan, and Virginia, only 12% (3,409) of 29,153 individuals had used buddy/companion services (Ashman, Conviser, & Pounds, 2002). Clinicians can help to develop programs with volunteer HIV peer support or buddy participants.

Conclusions

Peers can be an important form of social support. They can provide a unique opportunity for mutually supportive relationships. This study also proposed a more complete conceptualization of peer support in health care contexts that would include a broader range of peer-peer relationships and a larger list of functions.

Acknowledgments

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Clinical Considerations

- Clinicians need to (a) assess patient access to peer support, (b) provide opportunities for peer support in the clinical setting, and (c) enhance disclosure and support-seeking skills to facilitate this benefit.

- Clinicians can assess patient preferences and provide information and resources to help patients access and use peer support.

- Clinicians can help to develop programs with volunteer HIV peer support or buddy participants.