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USING SOCIAL NETWORK INTERVENTIONS TO IMPROVE MENTALLY ILL CLIENTS' WELL-BEING

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Abstract

This paper reviews empirical evidence showing that the structures of the social networks of mentally ill clients influence both their well-being and their use of mental health services. Network interventions that might help clients better address network-related problems, and might help their families improve relationships and prevent caretaker's burn-out are presented. A case illustration will demonstrate how practitioners can assess a client's social network, involve the client's family in treatment, evaluate that treatment, and select tailored interventions. This case will emphasize both how practitioners can help a client restructure her network, and the complementary roles of formal and informal networks. The author shows practitioners how to match clients' initial network structures to interventions and desired outcomes. Practitioners can thus help clients modify their social networks, increase the use of preventive services, and improve their well-being.

Keywords

social network; intervention; mental illness; service utilization

INTRODUCTION

Studies of the social networks of seriously mentally ill people have demonstrated a relationship between their network structures—the size, density, reciprocity, multiplexity, and the strength of ties—and both their well-being and their use of mental health services. It has been documented that certain structures and functions of social networks are particularly related to increased hospitalizations and to decreased use of other mental health services. These findings have a major implication in social work clinical practice: mental health providers can base interventions on their clients' unique networks in order to help them restructure their social networks so that they may cope better with their illnesses. This paper underscores network interventions that help clients better modify their networks and uses a case illustration to demonstrate how social workers can assess a client's social network, select tailored

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interventions, and help the client restructure her network and improve her well-being. Special emphasis is placed on the complementary roles of informal networks and formal organizations in helping clients identify and access mental health services.

SOCIAL NETWORKS OF MENTALLY ILL CLIENTS

Social network, as related to people with mental disorders, has been defined in several studies (Albert, Becker, McCrone, & Thornicroft, 1998; Dean, 1986; Ellison, 1983; Walker, MacBride, & Vachon, 1977; Walsh, 1994). These definitions are based on an ego-centered approach, in which the mentally ill person relates to the alters of his/her network. These authors agree that social networks are sets of social contacts through which a mentally ill person develops and maintains his/her personal and social identity.

Through their networks, mentally ill clients may receive many kinds of social support, including emotional, instrumental, and informational. These networks may include immediate and extended family members, members of the community, and mental health professionals. A social network thus represents the totality of a person's relationships, including that person's social support—the assistance he/she receives from any portion of his/her total network (Malone, 1998; Pearlin, Mullan, Semple, & Skaff, 1990).

Most studies concerning the relationship between social network and service utilization focus on clients with long-term mental illnesses, such as schizophrenia, schizoaffective disorder, bipolar disorder, major depression, and delusional disorder, all of which cause severe functional impairments (Albert et al., 1998). Service use measures in most studies concern inpatient care, possibly because frequency and length of hospitalizations and inpatient visits are easy to document, as compared to visits to doctors and social workers and attendance at prevention, educational, and recreational programs.

Although of limited scope, service use measures of inpatient care do provide a picture of service use patterns for seriously mentally ill clients. Based on the empirical evidence available, this paper assumes that clients who use hospital services are not necessarily more likely to use other mental health-related services, such as clinical social work interventions. Clients who access other mental health services may not need frequent and/or long-term inpatient care, precisely because they use those other services. For this reason, it is important to understand how social networks influence service use and how practitioners may provide network interventions to help increase the use of preventive and maintenance services, and to decrease hospitalizations.

Social networks, which may include social workers, can mobilize resources, provide information, identify mental health episodes, decrease stress and social isolation, and influence service use. For example, in a study of outpatient psychotic clients, Mitchell (1989) found an association between people available to these clients for personal conversations, and how frequently these clients attended their psychotherapy sessions. Horwitz (1977) found that informal ties with people who have some understanding of mental illness increased service referrals for first-time users of psychiatric services.

This literature indicates that social workers can help seriously mentally ill clients modify their networks to achieve well-being. In order to help these clients, social workers need to understand better the relationship between their social networks and their use of medical and social services. A brief review follows on the size and density of client networks; the levels of reciprocation in their relationships; the strength of the ties they develop; and the multiplexity of services they receive within their network. Each of these network structures and functions are explored as they relate to the case of a young woman diagnosed with schizophrenia.

CASE ILLUSTRATION

Ms. A, a 28-year-old woman diagnosed with schizophrenia, has been hospitalized several times with psychotic symptoms. Psychotropic medication has helped control these episodes, and Ms. A. is now in therapy with a social worker affiliated with a community-based mental health clinic. Ms. A's initial complaints included lack of motivation, negative feelings toward family members, and unresolved feelings for her former boyfriend.

An assessment of Ms. A's network showed that it included her widowed mother, her married sister, her single brother who lived on his own, her former boyfriend, her psychiatrist, and now her social worker. Ms. A described her relationship with her family as strained by her dependence on them. Her brother came around only to take her to medical appointments and to get her prescriptions filled. Her sister hardly visited, but when she did, she helped Ms. A buy clothes and beauty products. Ms. A perceived her relationships with her psychiatrist and former boyfriend as slightly positive.

Ms. A reported that, even after they broke up, her boyfriend still came around to see her and called her on special occasions. Ms. A did not work or attend school, and had not been using either prevention or recreation services. She spent most of her time in the small apartment she shared with her aging mother, who took care of her needs, made certain she took her medications, and served as her confidant. Ms. A had been hospitalized several times in the past few years and had a history of suicide ideation without any formal attempts. She complained about living at home, felt isolated from peers, and resented both her brother and sister for not paying attention to her.

Ms. A's therapist assessed that she lacked important skills (e.g., she had strained speech and difficulty in establishing eye contact) that could help her socially. Ms. A had symptoms of depression and anxiety, which she connected to the fact that her mother had been sick and had been treated for myriad physical and emotional symptoms typical of caretaking burn-out. It appeared that Ms. A had highly dependent and non-reciprocal relationships. She did little to help her mother with house work, had a difficult time listening to her mother or any other person in her network including, her former boyfriend. When asked, Ms. A reported dissatisfaction with her social network, including the lack of support from her siblings and the absence of more people in her life. Both Ms. A and her therapist agreed to work on modifying her network to help her become less dependent and more reciprocal.

Network Size and Density

The size of the network of a person with a mental disorder may estimate the number of social ties (with differing levels of closeness) that a person has at a given point in time or simply the number of alters in the network of that focal person (Marsden, 1987). The case of Ms. A illustrates a common finding in the literature: that clients with chronic mental illnesses have significantly smaller networks than do healthy individuals (Beels, Gutwirth, Berkeley, & Struening, 1984; Hammer, 1981; Meeks & Murrell, 1994; Walsh, 1994). People with neurotic and psychotic illnesses can have networks half the size of the networks of healthy individuals (Cutler, Tatum, & Shore, 1987; Maguire, 1983), and the networks of people with psychotic disorders were found to be approximately one-fifth the size of networks of healthy individuals (Pattison, DeFrancisco, Frazier, Wood, & Crowder, 1975).

Note that Ms. A's network has only six members—her mother, brother, sister, former boyfriend, psychiatrist, and social worker. This network had been shrinking over time. Neither her sister nor her brother had visited consistently for the past two years. Her mother, who had been sick and hospitalized, was no longer so readily available. Even though she had two service providers in her network, a social worker and a psychiatrist, she was experiencing a

phenomenon described by several researchers: as mental disorders progress, mentally ill clients lose members of their networks (probably due to caretakers' burn-out), making the networks smaller and ultimately causing more re-hospitalizations (Cohen & Sokolovsky, 1978; Lipton, Cohen, Fisher, & Katz, 1981; Tolsdorf, 1976). Indeed, following a psychotic episode, Ms. A. was hospitalized at a time when her mother was also in the hospital. Shortly after discharge, Ms. A. broke up with her boyfriend, had another episode, and was re-hospitalized.

Granovetter (1976) defines network density as the ratio of the number of ties observed in a network to the number of ties theoretically possible. Although Ms. A had only six key ties in her network, potentially she could have many others from school, work, her neighborhood, and her extended family. The density of a network is determined by the levels of interconnectedness among network members (Bott, 1971) and the extent to which members of the network maintain contact with one another (Bott, 1971; Simmons, 1994). Like Ms. A, other seriously mentally ill clients tend to have fewer clusters of closely connected people (Hammer, 1981). Whereas healthy people may have five to six clusters, schizophrenic clients may have only one.

Moreover, the networks of seriously mentally ill clients are usually dense, with high levels of interconnectedness and intense support provided mostly by family members. This is also illustrated by Ms. A.'s case. Her mother had been showing signs of burnout ever since her son and her other daughter stopped coming around regularly. In dense networks, when external help is needed, both patient and supports may have limited resources to tap into (Morin & Seidman, 1986), leading to re-hospitalization and to more days in the hospital (Dozier, Harris, & Bergman, 1987).

Network Multiplexity

Multiplexity refers to people in a network providing more than one type of support to the mentally ill client. Those who receive multiple services from individuals in the network are said to have multiplex relationships (Tolsdorf, 1976). Mentally ill individuals have fewer multiplex relationships. Of the six relationships in Ms. A.'s life, only the one with her mother is truly multiplex. Cohen and Sokolovsky (1978) indicate that mentally ill people have fewer multiplex relationships and are thus more prone to re-hospitalization. When Ms. A's mother was sick and thus absent, Ms. A herself was hospitalized. None of the other five people in her network were able to provide all the support her mother usually provided.

Network Reciprocity

Reciprocity refers to a person's ability to reciprocate support, goods, and services to the people in his/her network. However, mentally ill clients may not have developed the social skills (e.g., ability to express feelings, assert opinions, fulfill emotional needs) necessary to reciprocate, and may thus lose support over time. Mentally ill clients identify low levels of reciprocation in their relationships, and most people will not continue to provide support without reciprocation (Ellison, 1983). As in Ms. A's case, clients usually receive more assistance than they are able to give back (Beels, 1981; Cutler & Tatum, 1983; Froland, Brodsky, Olson, & Stewart, 1979; Meeks & Murrel, 1994). Therefore, schizophrenic clients have more dependent (non-reciprocal) relationships, fewer ties providing instrumental support, and again are more prone to hospitalization (Cohen & Sokolovsky, 1978).

Strength of Network Ties

Strength of network ties subjectively measures how close a person feels to others in his/her network. It also indicates the capacity of network members to influence the person (Marsden, 1987). A mentally ill person's perception of the strength of network ties is influenced by the types and frequency of services he/she receives. For example, Ms. A reports feeling close to

and loved by her mother, who consistently cares for her myriad needs. In studies of schizophrenic clients like Ms. A, researchers found a prevalence of tightly knit single clusters around family members. In a study of rehabilitation of schizophrenic clients by extended family, El-Islam (1982) found that these patients were less likely to be hospitalized during mental health episodes. Other studies found higher service use to be associated with more family members and fewer outsiders in the network (Holmes-Eber & Riger, 1990; Lipton et al., 1981).

NETWORK STRUCTURE AND INTERVENTIONS

Ms. A's case illustrates that the networks of mentally ill people tend to be small and dense; to be filled with dependent non-multiplex relationships; to have low reciprocity; and to have weak ties. As a consequence, mentally ill people have fewer supports than the general population (Holmes-Eber & Riger, 1990; Walsh, 1994). Accordingly, these clients, who may lack social skills and have difficulties with social exchange and network formation, are more prone to hospitalizations. This may be because problems in their networks make them less likely to use mental health services that could otherwise prevent or decrease hospitalization.

Interventions tailored to the network structures of mentally ill clients may help increase those clients' use of preventive mental health services. Such services might include case management, psychotherapy, and recreation. At the same time, network-tailored interventions, because they target both the focal person and the people who support him/her, may also encourage more informal social interactions, more reciprocity and more multiplexity. All these network transformations, in turn, can make for more and better informal services (reliably picking up and administering medication, making social contact with the focal person, etc.) that can ameliorate mental health and improve quality of life, as demonstrated below.

Assessing Ms. A's Network Structure

There is agreement in the literature that assessment of network structure, followed by network interventions, should be a priority in the treatment of clients in general (Tracy & Biegel, 1994), and especially those with serious mental disorders (Pickens, 1999; Walsh, 1994). Providers must consider that, even though the network dimensions of seriously mentally ill clients may be similar, each client's network reflects uniquely the nature and severity of his/her mental disorders, personality, social skills, and psychosocial needs. Network interventions must account for specific personal traits and specific network dimensions.

In order to assess a client's social network, providers may use myriad techniques, from listing the names and relationships of important people in a client's life to developing a complex social network map (for details, see Tracy & Wittaker, 1990). The mapping of a client's network must account for the size, density, multiplexity, reciprocity, and strength of ties in the network. It is recommended that providers draw circles and/or grids to help clients visualize both the structure and the functional patterns of their networks (e.g., people available for medically related activities, or services the client can exchange with supporters in his/her network). Ms. A's grid would list the names of her major sources of support, and characteristics like 'reciprocity,' 'multiplexity,' and 'strength of the tie' would appear across the top. In her therapy sessions, Ms. A would be asked to evaluate each source of support in terms of each of those characteristics, and thus would set up specific goals for modifying each relationship (Table 1).

Choosing an Intervention

The methodology involved in assessing the structure, content, and specific functions of a network, as well as the therapeutic techniques to treat mentally ill clients have been detailed elsewhere. (For reviews on network assessment, see Kemp, Wittaker, & Tracy, 1997; and for

treatment modalities, see Turner, 1986). Once the network assessment is complete, providers, whatever their theoretical inclinations, can use network interventions to help clients develop adaptive networks and to facilitate mental health service use. This can be achieved by increasing network flexibility, stability, size, and multiplexity (Morin & Seidman, 1986), and by capitalizing on the natural functions of social networks.

Ms. A's therapist, after meeting individually with her, would convene sessions with her mother, brother and sister, in order to enable them, as a network cluster, to identify positive aspects of their relationships with Ms. A. They would be encouraged to find activities they could share with her (e.g., house cleaning, washing the brother's car, outings with the sister's child), and thus develop reciprocity. Increasing the number of telephone contacts between Ms. A and her family could also be a goal of the treatment. The same strategies could be helpful in enhancing Ms. A's relationship to her former boyfriend. Because the major reason for the break-up was the boyfriend's frustrations around Ms. A's difficulty reciprocating, learning new skills could help her rekindle this relationship. In essence, Ms. A's therapist would become a facilitator for her entire network, helping each member identify various sources of strength in their relationship to Ms. A and thus to develop multiplexity.

Individual meetings between Ms. A and the therapist are recommended for establishing trust and setting treatment goals. Ms. A's goals could include improvement of financial dependence by finding a job near her home, and development of more social contacts to improve both the size and the density of her network. Financial independence might be helped by connecting the client to vocational agencies that provide opportunities for training and for earning stipend money. The therapist could also help Ms. A accomplish her goals by referring her to social and recreational programs, and by providing consistent coaching to help her feel comfortable and establish new relationships in these new settings.

Strategies and adjunct services aimed at reshaping the social networks of clients with serious mental disorders can be summarized as follows:

- Perform network assessments (Gottlieb & Coppard, 1987; Walsh, 1994);
- Provide case management and linkages to social services (Pescosolido, Wright, & Sullivan, 1995), religious institutions (Walsh, 1994), and adult centers (Pickens, 1999);
- Help clients create opportunities to meet new people (Katz, 1993; Walsh, 1994);
- Provide referrals to medication groups and half-way houses (Beels, 1979);
- Build new ties and strengthen existing ones (Tracy & Biegel, 1994);
- Promote opportunities for bonding with network members (Ferris & Marshall, 1987);
- Cultivate case consultation to assist clinical decision-making (Tracy & Wittaker, 1990);
- Use multiple-family groups and psychoeducation (McFarlane et al., 1993, 1995).

These strategies aim to enhance social functions naturally provided in social networks. In Ms. A's case, her therapist would help her find in her network: (1) reassurance of her worth as a person (larger networks provide more opportunities for emotional, informational, and instrumental support); (2) access to information and services (less dense networks are more permeable to new services, tasks, and information); (3) intimacy (as she becomes more reciprocal, Ms. A may decide to date again); (4) guidance and advice; (5) social integration (reciprocal network ties may provide opportunities for sharing experiences, information, and ideas); and (6) general assistance.

Involving the Client's Family

As demonstrated above, it is important to involve family members in network interventions, especially when the family represents the main cluster of support in the client's life. In working with seriously ill clients, Pickens (1999) recommends involving informal network members, and eliciting from them ways in which they can assist the focal person. McFarlane et al. (1995) contend that network expansion, through multiple-family group treatment, may decrease relapse and hospitalization in schizophrenic clients. Providers can help clients select certain network clusters on which to work, those that may benefit most from changes in the overall network structure (Walsh, 1994). In working with Ms. A's family, her therapist needs to help her mother, brother, and sister redefine the ways in which they can each help Ms. A without feeling pressured. The therapist must also help Ms. A identify sources of support outside of the family, such as the boyfriend and other acquaintances.

Providers must keep in mind that mentally ill clients routinely are cared for by informal network members (Tausig, O'Brien, & Subedi, 1992; Wright, 1998), as illustrated by Ms. A's case. These informal caregivers belong to at least two sub-systems of network ties: the sub-system of the focal person, and the caregiver's own subsystem (Wright, 1998). This is important because long-term caretakers may see support from their own networks decrease over time (McFarlane, 1990). For instance, Ms. A's mother, who has dedicated many years to helping her daughter, may have isolated herself from friends. Also, as Ms. A's brother and sister distanced themselves from her, they also became less useful to their mother. Therefore, caretakers like Ms. A's mother may become psychologically distressed (Johnson, 1983), and suffer from social isolation (Lefley, 1996). For this reason, caretakers should be invited to participate in network interventions. They need to be encouraged to map out their own networks and to modify them accordingly.

As they better understand their clients' network dimensions, providers can tailor strategies to enhance clients' abilities to identify and use mental health services in their communities. However, providers must take into account both caregivers from the focal person's network (McFarlane et al., 1995) and members of those caregivers' networks (Ferris & Marshall, 1987). For example, Tracy and Biegel (1994), citing Brown, Birley, and Wing (1972), contend that strengthening connections and decreasing conflicts among family members may strengthen all supportive relationships in the focal person's family. Ms. A's mother, for example, could be referred to a support group for families of people with schizophrenia.

Network Intervention Outcomes

Social workers who provide network interventions need to follow standard protocol for helping clients set up the goals of their treatment. Since these interventions often involve the people closest to the clients (family and friends), their input should be elicited and their goals contrasted with those of the client (Ferris & Marshall, 1987). Goals should only be finalized after serious consideration by all parties involved, and flexibility for changes must be a part of the treatment contract (Kirst-Ashman & Hull, 1994). This process is important for it serves as the blueprint for evaluating the intervention.

The evaluation of a network intervention should follow the initial goals of treatment. For example, Ms. A and her family set the following basic goals for the intervention. Ms. A should (1) achieve some level of financial independence; (2) develop more social contacts; (3) increase reciprocity; and (4) unburden her mother. One year after the network intervention started, Ms. A had followed the therapist's advice and entered a vocational program. The program provided a stipend, which Ms. A used to buy clothes and cosmetics. Ms. A felt better about her appearance and more confident that she could get out of the house. Through the vocational

program she made three friends, thus expanding her network. One of the new friends encouraged her to contact her former boyfriend, and eventually she did.

Soon after, she began to see her former boyfriend and became more reciprocal, better able to pay attention to him and help him with household chores. In turn he took her out more often, gave her small presents, and encouraged her to enroll in a fitness class. While Ms. A expanded her network, her siblings visited her mother's home more often, thus providing support both to Ms. A and their mother. A year later, Ms. A had expanded the size and functions of her network. She had been using prevention services and had not been hospitalized. This demonstrates that a network intervention can indeed help reconcile the functions of both formal and informal services and improve the well-being of seriously mentally ill clients.

Matching Clients' Network to Intervention Needs

Network interventions can be implemented by themselves, or can be built into varied treatment modalities. These modalities include: self-help groups; social network therapy; skills training; support groups; family therapy; case management; community organization; and advocacy work. Providers need to find effective matches between treatment modalities, network strategies, and clients' network needs. Thus, it is helpful to cluster these interventions into categories that reflect network structure, functions, and desired outcomes.

Heaney and Israel (1997) propose a typology that includes four social network interventions: (1) development of new social network ties; (2) enhancement of existing network ties; (3) enhancement of network through the use of natural community helpers; and (4) enhancement of networks at the community level through participatory problem-solving processes. Each of these interventions could be used to treat Ms. A. However, providers may choose from these interventions those that work best for their clients. These interventions have been summarized in Table 2, which practitioners can use to guide their work. The table shows anticipated network dimensions for mentally ill clients matched with desired intervention outcomes and examples of available network interventions.

The four interventions represent strategies that can be used, singly or in combination, by practitioners to help clients restructure or reshape their networks. The table guides providers to assess clients' personal network characteristics and needs, to engage clients' networks in defining desired outcomes, and, ultimately, to match specific strategies to specific goals. These interventions, which focus on both formal and informal network participation, can enhance the well-being of mentally ill clients and help ease caretaking burdens.

CONCLUSION

The empirical evidence shows that the networks of clients with serious mental disorders are generally characterized by high density and small numbers of dependent, non-reciprocal ties. The few informal ties that care intensely for the focal person may become isolated from their own networks, which then dwindle as the focal person's illness progresses. People with severe disorders have difficulties reciprocating services, making it difficult for them to maintain ties over time. All these characteristics have been illustrated by Ms. A's case.

Mental health providers can help clients and their supporters to modify the overall structure of their mentally ill clients' social network. In order to enlarge clients' networks and make them less dense, providers can help clients develop more social ties in their communities and with other professionals, who will bring to the network expertise, more information and innovation, and more multiplexity (Pescosolido et al., 1995). Moreover, matching the existing network structure of a mentally ill client to a tailored network intervention, as shown in Table 2, may

help reshape the client's network in such a way that it better facilitates the client's use of mental health services—other than inconvenient and expensive psychiatric hospitalizations.

It remains for mental health researchers to measure specific network structures that optimize mental health and service use. Providers, who consistently develop strategies to address network malfunctioning, may be unable to disseminate successful interventions. Therefore, in order to develop more specific, detailed network interventions, researchers need to tap into practitioners' strategies and expertise.

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TABLE 1

Assessing Client's Network

Supporter	Reciprocity	Multiplexity	Strength of Tie	Goals
Mother				
Sister				
Boyfriend				

TABLE 2

Matching Network Dimension, Outcomes, and Interventions

Initial Network Dimensions	Expected Network Outcomes	Network Intervention Types and Strategies
Small Size	<ul style="list-style-type: none"> • Increase network size to help the flow of services/tasks and information from network to focal person. [Becker et al. (1997), found that the addition of 10 members is associated with one additional type of formal service use.] 	<p>(1) <i>Develop new social network ties</i></p> <ul style="list-style-type: none"> • comprehensive network assessments • opportunities to meet new people • organize community resources • build new ties, and strengthen existing ones • bonding with other networks
High or Low Density	<ul style="list-style-type: none"> • Moderate density: Retain and preserve close ties, while increasing the number of weaker ties in the community 	<p>(2) <i>Enhance existing network ties</i></p> <ul style="list-style-type: none"> • comprehensive network assessments • referrals to community programs • medication groups • opportunities for family bonding
Low Reciprocity	<ul style="list-style-type: none"> • Preserve existing reciprocal relationships and develop new ones, in order to increase network supportive characteristics and longevity of relationships. 	<p>(3) <i>Enhance network using natural community helpers</i></p> <ul style="list-style-type: none"> • comprehensive network assessments • case management • linkages to social and religious services • self-help groups • mobilization of community resources
Few strong ties in family and weak ties in the community	<ul style="list-style-type: none"> • Preserve strong reciprocal ties. • Develop multiplex ties in the immediate network. • Develop ways for the support coming from weak ties to reach the focal person. • Increase clients' ability to mobilize weak ties. 	<p>(4) <i>Enhance network through problem-solving process</i></p> <ul style="list-style-type: none"> • comprehensive network assessments • case management • self-help groups • opportunities for family bonding • case consultation
Heavily dependent relationships and few multiplex relationships	<ul style="list-style-type: none"> • Preserve close ties, while increasing network permeability, so that focal person may receive support from both stronger as well as weaker ties 	